Construction News

★Denotes work advertised in ENGINEERING NEWS.
✚Denotes contract awarded. The names of bidders awarded contracts are set in CAPITALS.

A New Railway in Panama

Panama Canal Zone (By Cable)—R. W. Hebard & Co., Panama, has the concession for the Chiriqui R.R. All purchases will be made by J. M. Motley, 16 Exchange Place, New York.

The Chiriqui project consists of a line from Pedregal, on the Pacific, to David. From this point there will be two branches, one 20 miles to La Concepcion, and another, 33 miles, to La Boquet. The La Boquet branch presents some unusual features, as an elevation of 4000 ft. will have to be attained in a distance of 33 miles. The funds for the construction will be furnished by the Republic of Panama This information was obtained by a special representative of "Engineering News," who is now in South America.

From the "Canal Record," issue of Sept. 2, we extract the following:

"Grading on the new railroad in the province of Chiriqui has been completed for a distance of about seven miles, four miles between the port of Pedregal and the city of David, and three miles on the La Concepción branch of the road. This branch line, extending from David to the village of La Concepción, a distance of about 18 miles, will be the first to be completed.

"About 25,000 Oregon pine creosoted ties have been delivered to date; these cost, laid down, about $1 each. The contractors, R. W. Hebard & Co., are preparing specifications and conditions under which native ties, delivered at any point on the line, will be purchased. It is anticipated that 25,000 native hardwood ties can be obtained locally. The contractors are purchasing from the Panama Canal all the old 70-lb. rail in good condition that can be spared, in addition to a miscellaneous lot of other equipment, including two small Porter locomotives, used in the construction of the canal locks."

American Machinery for Spain—The Spanish government has entered the American market for the immediate purchase $2,000,000 of contractors' machinery and machine tools.

This report, emanating from the Foreign Trade Bureau of the Philadelphia Commercial Museum, has been verified by a representative of "Engineering News."

George C. Gibson, Asst. Chief of the Foreign Trade Bureau, placed the correspondence relative to this statement at the disposal of our representative.

Of chief interest was a letter, dated Madrid, Aug. 20, from the Sociedad General de Representaciones, agents for machinery and accessories of all classes, industrial installations, and materials for railroads and tramways. In part it was as follows: "We have contracts to furnish the Spanish government with several million dollars' worth of machinery and supplies but the war has prevented our fulfilling these contracts since most of the orders were placed with German and French firms."

"As you know, the Spanish government has given orders to start important public works, and millions will be spent for this purpose. This firm is furnishing all the factories of the War and Navy Departments with machines and tools and manufacturers of the following lines are requested to enter into communication with us for the supply of machinery, to wit: sensitive and upright drilling machines, cold metal sawing machines, gear-cutting machines, punching and shearing machines, grinding and polishing machines and machines for the manufacture of automatic revising and refilling of cartridges for Mauser guns."

In an interview with George C. Newcomb, Spanish consul at Philadelphia, Monday morning, in regard to the status of this company, he said, "This firm is one of the largest and most responsible in Spain, however, beyond that I know of no specific contracts which they may be handling for the government."

Senor C. G. Salas, Spanish Consul General, New York, when questioned Monday afternoon regarding definite plans and appropriations on the part of the government, said: "Last year in the official budget there was made an appropriation of some $10,000,000 for improvements to extend over a period of ten years, but due to the problem of unemployed labor, I understand that steps have been taken to push the work along as rapidly as possible, so as to give employment to the idle men.

"The work which the government has undertaken includes new roads, electric power installation, railway and illumination, irrigation, the dredging of Cadiz harbor together with the building of quays and breakwaters at the same port, railways in Morocco and the improvement of the port of Melilla."

RAILWAYS

✚**Virginia**—Norfolk & Western Ry.—A contract has been awarded by this company to WALTON & CO. for clearing a tunnel on the Pocahontas division, which recently caved in. The company also contemplates the construction of an extension from Suiters to Cedar Bluff, about 22 miles. J. E. Crawford, Roanoke, Va., is Ch. Engr.

Georgia—Rocky Ford & Southwestern Ry.—Plans are being considered by this company for the construction of a railroad from Rocky Ford to Portal, Ga., about 12 miles. Henry B. Griffin, Rocky Ford, Ga., is interested.

North Georgia Mineral Ry.—This company is being organized for the purpose of constructing a railroad from Atlanta north through Fulton, Cobb, Cherokee and Bartoe Counties, about 50 miles. William J. Morrison and A. C. King are interested.

The construction of a railroad from Homer, Ga., to Lula, Ga., is contemplated by Zeigler & Jones Co.

Tennessee—See item under Miscellaneous — Interlocking plant, Chattanooga, Tenn.

Tennessee—Alabama Great Southern R.R.—Plans are being made by this company to spend about $80,000 for the improvement of the Belt Ry. in Chattanooga, Tenn., in connection with the double-track work on the line from Chattanooga to Wauhatchie. C. Dougherty, Cincinnati, Ohio, is Ch. Engr.

Kentucky—Chicago, Burlington & Quincy R.R.—Plans are being made by this company to resume work on the construction of its line from Paducah, Ky. to Metropolis, Ill. C. H. Cartlidge, Chicago, Ill., is Ch. Engr.

Illinois—Chicago, Burlington & Quincy R.R. — See item under Kentucky.

✚**Wisconsin**—Chicago & Northwestern Ry.—A contract has been awarded by this company for the construction of a logging road from Kingston, Wis. to Cleary, Wis., about five miles, to WHITE & DUFFY, Chicago, Ill.

Montana—Great Falls Western R.R.—This company has been incorporated to construct a railroad through Cascade, Lewis and Clark and Powell Counties, about 110 miles long. The incorporators include A. C. Goodnow, Evanston, Ill., J. D. MacVicar, Great Falls and James O'Grady, Great Falls.

Arkansas—According to press reports the construction of a 70-mile railroad to connect Hoxie, Smithville, Poughkeepsie, Evening Shade, Melbourne and Calico Rock, Ark., is contemplated by the Arkansas Mining & Development Co. J. A. Gay, Poughkeepsie, Ark., is interested.

Texas—Quanah, Acme & Pacific Ry.—Surveys are being made by this company for the construction of a railroad from Roaring Springs, Tex. to Roswell, N. M., about 86 miles. Robert Gray, Quanah, Tex., is eGn. Mgr.

Oklahoma—Oklahoma Central R.R.—This company has been purchased by the Atchison, Topeka & Santa Fé R.R. Announcement has been made that the new owners contemplate improving the line in order to establish efficient service to handle the coal tonnage from Lehigh, Okla.

Arizona—Mascot & Western Ry.—Contracts will soon be awarded by this company for the construction of a 17-mile railroad from the mines of the Mascot Copper Co., near Dos Cabezos, Ariz. to Wilcox, Ariz. C. R. Weston is Gen. Mgr.

Oregon—Booth Kelly Lumber Co.—The construction of a railroad in Lane County, Oregon, to its timber holdings is contemplated by this company. The main office of the company is in Portland, Ore.

✚**California**—San Diego & Arizona Ry. Co.—ROBERT SHERER & CO., Pacific Electric Bldg., Los Angeles, have been awarded the contract for grading and constructing reinforced-concrete culverts on a portion of its right-of-way in California.

California—Western Pacific Ry. Co.—Plans are being prepared by John F. Stevens, Ch. Engr. of the Gould system, for the construction of feeder lines to Fairoaks, Orangevale and Folsom, to connect with the main line near Sacramento.

California Terminal Ry. Co.—This company has filed articles of incorporation to construct a railroad from San Francisco to Sacramento, about 95 miles with branch lines to Petaluma and Napa, making a total trackage of 118 miles. The capital is placed at $200,000. The directors are C. W. Conlisk, San Francisco and C. H. Lind and W. M. Rank, Alameda, Calif.

Alaska—The government engineers are making surveys for the proposed railroad in Alaska. Lieut. Fred K. Mears of the Alaska R.R. Comn. will be ready to submit a report on the route about Nov. 1.

ELECTRIC RAILWAYS

New Haven, Conn.—Plans are being prepared by the Connecticut Co. for the reconstruction of several of its lines in New Haven. F. P. Harlan, New Haven, is Mgr. of the New Haven Division.

Southington, Conn.—Preliminary arrangements are being made by the Waterbury & Milldale Tramway Co. for the construction of three miles of new track in Southington.

Du Bois, Penn.—According to press reports, the Jefferson Coal Co. contemplates the construction of an electric railway from Coal Glen to Falls Creek, to connect with the line of the Du Bois Traction Co.

Fairmont, W. Va.—The Monongahela Valley Traction Co. has secured the right-of-way for the extension of its line from Fairmont to Riverside. James O. Watson, Fairmont, is Gen. Mgr.

Owensport, W. Va.—The West Virginia Electric Ry. Co. is being organized to construct an electric railway from Owensport to Weston, about 50 miles.

Parkersburg, W. Va.—The Charleston, Parkersburg & Northern Ry. Co. will award contracts this fall for the construction of part of its 75-mile electric railway to connect Parkersburg, Sissonville, Guthrie, Ripley and Charleston K. B. Stephenson, Parkersburg, is Secy.

Florence, Ga.—The Central Carolina Electric Ry. Co. is being organized for the purpose of constructing an electric railway in Florence.

Waycross, Ga.—The Waycross Street & Suburban Ry. Co. is making arrangements for the construction of an extension to Hebardville.

Jacksonville, Fla.—The Jacksonville Traction Co. will construct additional track on Hogan St. from Bay to Eagle and Cedar Sts. Hardy Croom, Jacksonville, is Local Mgr. and Pur. Agt.

Campton, Ky.—The Mountain Central Ry. Co. has been organized for the purpose of constructing a 12-mile electric railway from Campton to Campton Junction. Floyd Day and J. C. M. Day are interested.

Middlesboro, Ky.—W. Godfrey Hunter has secured a franchise and is making preliminary arrangements for the construction of an electric railway from Middlesboro to the coal mines along Yellow Creeek. The line will be seven miles long.

Middletown, Ohio—Michael Klaiber, Jr., Reading, Ohio, is interested in the construction of an electric railway from Middletown to Norwood. Surveys have been started.

Muskegon, Mich.—The Muskegon Traction & Light Co. has applied to the City Council for a franchise for the extension of its Allen St. line in Muskegon. H. S. Nelson, Muskegon, is Pur. Agt.

Aurora, Ill.—The Aurora & Mendota Electric Ry. Co. is securing the right-of-way for the construction of its proposed electric railway to connect Aurora, Plano, Yorkville and Sandwich.

Joliet, Ill.—The Joliet & Eastern Traction Co. has been incorporated to construct and operate an electric railway to connect Joliet, New Lennox, Frankfort, Matteson, Chicago Heights, Hammond and Chicago. The incorporators include David F. Rosenthal, Leo S. Kosetcheck, Jacob Schwartz and Edmund J. Clausen.

Jefferson City, Mo.—H. W. Knight, Chicago, Ill., is interested in the construction of an electric railway from Jefferson City, Mo., to Keokuk, Iowa.

San Antonio, Tex.—The San Antonio, San José & Medina Valley Interurban Ry. Co., which has been organized for the purpose of constructing an interurban electric railway between San Antonio and Medina Dam, about 28 miles, will sooon begin the grading work The company will also lay out a town site at the Medina Dam terminus of the line. Noted June 18.

St. George, Utah—Surveys have been started for the construction of an electric railway from Lund to St. George. A. B. Christensen, Salt Lake City, is interested.

Phœnix, Ariz.—The Salt River Valley Electric Ry. Co. will construct an interurban electric railway system that will connect Phœnix with Scottsdale, Tempe and Mesa. It also has a franchise to lay a track on East Monroe St., in Phœnix.

Lynden, Wash.—Preliminary arrangements are being made by the Blaine-Lynden Electric Ry. Co. to start work on the construction of its proposed line from Blaine to Lynden. J. J. Pinckney, Blaine, is Pres. Noted June 4.

Olympia, Wash.—The Olympia Light & Power Co. is considering plans for the extension of its Fourth St. line to the city limits. L. B. Faulkner, Olympia, is Treas. and Mgr.

Fresno, Calif.—The Fresno Interurban R.R. is preparing to extend its electric line from Fresno Ave. to the Normal School, about 1½ miles. J. B. Rogers is Mgr.

Los Angeles, Calif.—The Malabar Improvement Association and the residents of Boyle Heights are interested in the proposition to construct a crosstown electric railway from First St. and Evergreen Ave. to Wabash Ave., in Los Angeles.

Blenheim, Ont.—A company is being organized at Blenheim for the purpose of constructing a hydro-radial railway from St. Thomas to Amherstburg.

Brantford, Ont.—The city has taken over the holdings of the Brantford Street Ry. Co. and of the Grand Valley Ry. Co. An announcement has been made by the Street Railway Commission that no extensions will be made on the lines until next spring.

LIGHT HEAT AND POWER

Newton, Mass.—Bids will be received until Sept. 30 by Walter B. Forbush, Comr. of Pub. Bldgs., for the installation of heating and ventilating apparatus in the Claflin School buildings on Walnut St. Alfred S. Kellogg, 53 State St., Boston, is Engr.

Reading, Mass.—Improvements and extensions to the municipal electric-light plant, to cost about $8000, are contemplated by the Board of Selectmen. Arthur G. Sias is Mgr. and Supt. of the plant.

Georgetown, Conn.—Greenwood & Noerr, Consult Engrs., Hartford, Conn., are receiving bids for the construction of a power house at Georgetown for the Gilbert & Bennett Mfg. Co., manufacturer of wire goods. The building will be 48x50 ft., 44 ft. high, of brick and steel, concrete tile roof, steel sash.

Poughkeepsie, N. Y.—The Central Hudson Gas & Electric Co. has been granted permission by the State Public Service Commission for the construction of two extensions to its plant, and to exercise two new franchises, one at Wappingers Falls, Dutchess County, and the other in the town of Hamptonburgh, Orange County.

Lebanon, N. J.—The City Council is considering the installation of an electric lighting system. It is proposed to secure the necessary power from the Hunterdon Electric & Power Co., High Bridge, N. J.

Philadelphia, Penn.—The A. Schoenhut Co. has had plans prepared for the construction of a boiler house, engine and pump house at Boston and York Sts., Philadelphia. The buildings will be of concrete and brick. Carl P. Berger, Penn Square Bldg., is Arch.

Yardley, Penn.—The New Jersey & Pennsylvania Traction Co. is enlarging and improving its local power house. The company is considering still further additions to the plant.

Beckley, W. Va.—The Beckley Utilities Co. contemplates the construction of an electric-light plant to cost about $1[illegible],000. The details have not yet been determined. James [illegible]boden, Charleston, W. Va., is Consult. Engr.

+Hutchinson, W. Va.—The Monongahela Valley Traction Co. has awarded contracts for the construction of an electric plant at Hutchinson to: The NICOLA BUILDING Co., Farmers' Bank Bldg., Pittsburgh, Penn., for a building, [illegible] x 230 ft.; BETHLEHEM STEEL CO., for gas engines, GENERAL ELECTRIC CO., Schenectady, N. Y., for electric generators. The total cost of the plant will be $300,000.

Wallace, N. C.—J. L. Boney contemplates the installation of an electric lighting system for the town. A dynamo and several transformers will be required.

Quitman, Ga.—The city has voted $40,000 in bonds, the proceeds of which will be used to enlarge the electric-light plant and purchase new equipment for the same. J. M. Curright is Supt.

Ocala, Fla.—An election will be held Oct. 27 to submit to the voters the question of a bond issue of $57,000 to be used for extensions and improvements to the municipal electric-light system.

Bay Minette, Ala.—(Official)—See item under "Water Supply and Irrigation."

Melville, La.—The city plans the installation of a municipal electric-light plant. W. L. Thompson is Engr.-in-Charge.

Dayton, Ohio—The City Council is considering holding a special election to vote on the question of a bond issue of $500,000, to be used for the construction of a municipal electric-light plant.

Norwalk, Ohio—Bids will be asked about Oct. 1 for the construction of a municipal electric-light plant, to cost about $120,000. A. W. Carpenter is Dir. of Pub. Ser. The H. Whitford Jones Co., Citizens' Bldg., Cleveland, is Engr.-in-Charge. Noted Feb. 5 and May 21.

+Norwood, Ohio—The Board of Control has awarded the contract for two Corliss engines of 460-hp. each, to the HARRISBURG FOUNDRY & MACHINE WORKS, Harrisburg, Penn., at $10,049; the contract for two 355-kw. generators was awarded to the ALLIS-CHALMERS CO., Milwaukee, Wis., at $8700. Noted July 30.

Sandusky, Ohio—The City Council has decided to submit to the voters the question of a bond issue of $200,000, to be used for the construction of a municipal electric-light plant. H. Whitford Jones & Co., 1303 Citizens Bldg., Cleveland, will be retained to prepare the plans if the plant is established.

Goshen, Ind.—The Hawks Electric Co., Goshen, is preparing to extend its lines, at a cost of about $20,000, to Waterford and New Paris. Eventually the company expects to extend its transmission system throughout Elkhart County and a portion of Kosciusko County. Owen C. Cover is Secy. and Mgr.

Mondovi, Wis.—It is reported that the Mondovi Electric Light & Power Co. will soon construct about 20,000 ft. of new transmission lines, and will purchase alternators, switchboards, oil engines, exciters, switches and a waterwheel governor. A. D. Alt is Secy. and Mgr.

Oelwein, Iowa—The plant of the Oelwein Light, Heat & Power Co. was recently totally destroyed by fire at a loss of about $50,000.

Waconia, Minn.—The town is considering the installation of an electric lighting system.

Alliance, Neb.—Preparations are being made for the installation of an electric-light plant in Alliance. A. C. Arends is interested.

Whitefish, Mont.—It is reported that bids will soon be received for the construction of a municipal electric-light plant in Whitefish.

+Palmyra, Mo.—It is reported that the contract for new equipment and rebuilding the electric-light plant and waterworks system has been awarded to the ARROW ENGINEERING CO., St. Louis, at $28,500. Noted May 7 and July 30.

+San Antonio, Tex.—Bartlett & Ranney, Consult. Engrs., have awarded the contracts for public utility plants in the new town of George West as follows: A. M. LOCKETT & CO., LTD., New Orleans, La., for power plant machinery and pumps; MARTIN WRIGHT, San Antonio, for the installation of electrical euipment, machinery, pole lines and street lights; J. W. MOORE & SONS CONSTRUCTION CO., Austin, Tex., for watermains and fire hydrants, sewage system and disposal plant; HECK MACHINERY CO., San Antonio, for a 50,000 gal. steel water tank and tower. Noted Aug. 20.

Tyrone, N. M.—It is reported that Phelps, Dodge & Co. will install a power plant at its mines at this place.

Montesano, Wash.—The Northwest Electric & Water Co., Montesano, plans to enlarge its power plant, and extend its transmission lines.

Seattle, Wash.—The city authorities are investigating various power sites available to the city, with a view of building a new hydro-electric plant, in order to take care of the anticipated increase of the demand for light and power during the next five years. A development of from 10,000 to 100,000-hp. is proposed.

Portland, Ore.—The Electrolytic Gas Co. will erect a gas plant at Center and 17th St. E. A. Finkbeiner is Local Mgr.

Pasadena, Calif.—The Pasadena Hospital will construct a new boiler room and purchase some new euipment at a total cost of about $12,000. F. J. Roehrig, 721 American Bank Bldg., Los Angeles, is the Arch.

Redwood City, Calif.—The Pacific Gas & Electric Co., San Francisco, will build a gas storage plant at East Marshall and Washington Sts.

San Francisco, Calif.—The Contra Costa Gas Co. plans the construction of a new gas plant, to cost about $145,000.

Juneau, Alaska—The Speel River Power Co. has received a grant from the U. S. Government, and will shortly begin the construction of a hydro electric power and chemical plant. The company will supply light and power to this city and adjacent territory. E. P. Kennedy, Seattle, is Pres.

Hamilton, Ont.—It is reported that the United Gas & Fuel Co. will build a coke and gas plant in Hamilton, estimated to cost $1,500,000.

BRIDGES

Portland, Maine—J. R. Worcester & Co., 79 Milk St., Boston, Mass., is preparing plans for a bridge connecting Portland and South Portland. It is reported that the Commissioners of Cumberland County will advertise for bids for its construction early in October. The cost will approximate $1,000,0000, of which the Portland Street R.R. Co. will pay $100,000, the Portland Terminal Co. about $400,000, and the City of Portland and Cumberland County the remainder.

Auburn, N. Y.—The Commissioners of Cayuga County plan to construct two new bridges in the Town of Conquest. J. Charles Dayton, County Supt. of Highways, will prepare the plans.

Troy, N. Y.—The following bids were received Sept. 10, by the Troy & West Troy Bridge Co., for the construction of the Congress St. Bridge, (a) superstructure, (b) bridge complete: Pennsylvania Steel Co., (a) $204,900; Great Lakes Dredge & Dock Co., (b) $499,000; King Bridge Co., Cleveland, Ohio, (a) $239,000; Holbrook, Cabot & Rollins, Boston, Mass., (a) $249,000, (b) $409,000; Phœnix Bridge Co., Phœnixville, Penn., (a) $187,068; American Bridge Co., New York, N. Y., (a) $249,000; P. J. Carlin Co., New York, N. Y., (a) $249,000, (b) $455,000. The contract has not yet been awarded, as some of the bids were incomplete. Noted Aug. 13.

Jersey City, N. J.—The lowest bid received for the construction of a bridge on the Hudson Blvd., East Weehawken Township, over the old railroad cut, was that of Curtis & Cavanagh, Hoboken, N. J., at $11,450. Noted Sept. 3.

The Boulevard Commissioners have rejected all bids for the bridge over the railroad cut, Weehawken Township, as exceeding the appropriation of $11,000. Modified plans have been prepared, and new bids will be received until Sept. 29.

Mays Landing, N. J.—The Federal Government has approved plans prepared by the Board of Chosen Freeholders of Atlantic County for the construction of a bridge over Mullica Creek.

+Trenton, N. J.—The Board of Chosen Freeholders of Mercer County has awarded the contract for a truss bridge over Stoney Brook, and a new wing wall for a stone arch in Hopewell Township to the GINDER CONSTRUCTION CO., Trenton, at $19,784. Noted Sept. 17.

Mercer, Penn.—Bids will be received until Oct. 6, by the Commissioners of Mercer County, for the construction of the superstructure of the Gamble Bridge, over Otto Creek, Fairview Township.

Philadelphia, Penn.—Plans have been prepared by the Survey Bureau for a reinforced-concrete bridge to be built on the line of Glenwood Ave., north of Seventh Ave., over the tracks of the Richmond Branch of the Philadelphia & Reading Ry. The estimated cost is $40,000, and bids will be asked as soon as the plans are approved by the Public Service Commission and the Art Jury. M. L. Cooke is Dir., Dept. of Pub. Wks.

+Pittsburgh, Penn.—The Commissioners of Allegheny County have awarded the contract for repairs and a creosoted wood block floor for Bridge No. 3 over the Youghiogheny River to F. F. SCHELLENBERG & CO., Oliver Bldg., Pittsburgh, at $46,000.

+The Commissioners have awarded the contract for the construction of two bridges over Pine Creek to the DUQUESNE CONTRACTING CO., Pittsburgh, at $14,603 for Bridge No. 14, and to A. & S. WILSON, Pittsburgh, at $15,503 for Bridge No. 16. Noted Sept. 3.

Pittsburgh, Penn.—(Official)—Bids will be received until 10 a.m., Sept. 25, by the Department of Public Works, for removing the present bridge and building the substructure of the new Sylvan Ave. Bridge; for paving the roadway and sidewalk of the North Side Point Bridge over the Allegheny River; also, for repairs to the Forbes St. Bridge, the Shadeland Ave. Bridge, the Warrington Ave. Bridge, the Fulton St. Bridge and the Edgebrook Ave. Bridge. Robert Swan is Dir. Dept. of Pub. Wks.

+Baltimore, Md.—The State Roads Committee opened the following bids Sept. 15 for the construction of a 150-ft. draw span in the Hanover St. Bridge: Penn Bridge Co., Beaver Falls, Penn., $103,800; Strobel Steel Construction Co., Chicago, Ill., $86,430; Scherzer Rolling Lift Bridge Co. Chicago (three designs), $108,250, $106,850 and $103,850; H. P. Converse Co., Boston, $126,501, alternate bid, $119,000. Noted Aug. 20.

Washington, D. C.—Press reports state that D. E. McComb, District Engr. of Bridges, is preparing plans for rebuilding the Pennsylvania Ave. Bridge over the Anacostia River at an estimated cost of $10,000.

+Parkersburg, W. Va.—The Commissioners of Wood County have awarded the contract for the construction of a bridge over Neal Run at Lauckport to the MERYDITH CONSTRUCTION CO., Marietta, Ohio, at $24,000. The structure will be 672 ft. long, concrete piers and foundations and a steel superstructure.

Elberton, Ga.—Bids will be received, until Sept. 28, by the Commissioners of Elbert County for the construction of a county line bridge over the Broad River. The estimated cost is $4500 for the reinforced concrete substructure and $7200 for the steel superstructure. Searcy B. Slack, Athens, Ga., is Engr. of Good Roads Dept.

Newton, Miss.—(Official)—Bids will be received until noon, Oct. 5, by the Board of Supervisors of Newton County, Decatur, for the construction of 18 small bridges in District No. 4, over streams on the Newton-Lawrence and Roberts Road, the Tanglewood Extension, Lake Hazel, and Newton and Garlandville Roads. All bridges to be of A-1 creosoted timbers. C. M. Wells, Decatur, is Clk. of the Bd.

Delaware, Ohio—The lowest bid received by the Commissioners of Delaware County for the superstructure of the Home Bridge was that of the Bellefontaine Bridge & Iron Co., at $9620, while the Capital Construction Co., Columbus, at $7449, was low bidder for the superstructure of the Multzer Bridge. Noted Aug. 27.

Delaware, Ohio—The Commercial Club is interested in the construction of a concrete bridge across the Olentangy River at Winter St. It will be about 300 ft. long, and 51 ft. wide. The estimated cost is $36,000. W. A. Morrison is Chn. of the Bridge Com.

+Portsmouth, Ohio—The Commissioners of Scioto County have awarded the contract for repairs to the substructure of the Lucasville Bridge to J. C. SHIVELY, at $9880.

Anderson, Ind.—The following bids were received by the Commissioners of Madison County for the construction of an additional span of 140 ft. to the 12th St. Bridge over the White River: Indiana Bridge Co., Muncie, $7780; Elkhart Bridge Co., Elkhart, $7750; Burke Construction Co., Newcastle, $6149.

Crown Point, Ind.—The Board of Commissioners of Lake County has made an appropriation of $75,000 for a lift bridge over the Indiana Harbor Canal at 151st St., East Chicago, and an appropriation of $16,000 for a steel bridge over Plum Creek at Dyer. The Commissioners voted against the construction of a $90,000 bascule bridge on Forsythe Ave., Hammond, and a $25,000 steel bridge over the Deep River, East Gary.

Lawrenceburg, Ind.—The County Council of Dearborn County has decided to create a fund of $35,000 for rebuilding bridges destroyed by the flood of 1913. The money will be obtained by an increase in taxes. W. S. Fagaly is County Audr.

+Petersburg, Ind.—The Commissioners of Pike County hav eawarded the contract for the construction of 13 bridges in the county to the VINCENNES BRIDGE CO., Vincennes, at $7393. Other bidders were: International Steel & Bridge Co., $7008; George Sailer, $8445; Frank English, $8269. Noted Sept. 3.

+Salem, Ind.—(Official)—The Commissioners of Washington County have awarded the contract for the construction of three bridges to the MONTGOMERY-PARKER CO., at $7200. Noted Aug. 27.

Grand Rapids, Mich.—Press reports state that the Michigan Ry. Engineering Co., Kalamazoo, Mich., will receive bids, until Oct. 1, for the construction of an 1100-ft. bridge at Grand Rapids.

Danville, Ill.—An election will soon be held to vote on the question of a bond issue of $120,000 for the construction of bridges at Bridge, Cleveland and William Sts. W. H. Martin is City Engr.

Harmon, Ill.—(Official)—Bids will be received until 10 a.m., Sept. 28, by the Town Clerk for the construction of the Clatworthy and Kimball Bridges, Harmon Township, Lee County, at an estimated cost of $2970 and $3000 respectively. They will be of steel with reinforced concrete abutments. L. B. Neighbour, Dixon, Ill., is County Supt. of Highways.

+Libertyville, Ill.—The Commissioners of Lake County, Waukegan, have awarded the contract for the construction of the Oak Spring Bridge, Libertyville Township, to JOHN DARROW, Waukegan, at $4790. It will be of reinforced concrete. Noted Sept. 3.

+Carroll, Iowa—The Board of Supervisors of Carroll County has awarded the contract for the construction of 11 culverts to the MARSH ENGINEERING CO., Des Moines, at $7580; the contract for a steel bridge was awarded to the STANDARD BRIDGE CO., Omaha, Neb., at $3344. Noted Sept. 3.

+Marble Rock, Iowa—The Supervisors of Floyd County, Charles City, have awarded the contract for the construction of a bridge over the Shell Rock River at Marble Rock, to the GOULD CONSTRUCTION CO., Davenport, at $23,150. Noted Aug. 20.

Albert Lea, Minn.—Bids will be received until 2 p.m., Oct. 1, by C. E. Brainerd, Audr. of Freeborn County, for the construction of State Bridge No. 1536, eight miles north of Oakland.

Little Falls, Minn.—Bids will be received until 2 p.m., Oct. 6, by B. Y. McNairy, Audr. of Morrison County, for State Bridge No. 1529 in the town of Darling; State Bridge No. 1531, town of Two Rivers, and State Bridge No. 1541, town of Mount Morris.

Kansas City, Kan.—The Federal Court has ordered the Commissioners of Wyandotte County to at once rebuild the Central Ave. Bridge over the Kaw River, to conform to the requirements of the Kaw Valley Drainage Board and the War Department. Frank Holcomb is County Clk.

+Lexington, Neb.—The Commissioners of Dawson County and the State of Nebraska have awarded the contract for the construction of a bridge over the Platte River at Lexington to I. E. DOTY, David City, Neb., at $39,790; the contract for a bridge across the Platte River at Overton was awarded to the same company at $37,780. Noted June 11, July 23 and Aug. 13.

North Platte, Neb.—The State Board of Control and the Platte Valley Bridge District will soon advertise for bids for an 800-ft. bridge at North Platte. It will be of reinforced concrete, and is estimated to cost $50,000. D. D. Price, Lincoln, Neb., is State Engr.

Medora, N. D.—The Board of Commissioners of Billings County has rejected all bids received Sept. 7 for the construction of a bridge over the Little Missouri River. Noted Aug. 13.

Kansas City, Mo.—The City Commissioners and officials of the Union Pacific R.R. and the Chicago, Rock Island & Pacific Ry. have agreed upon plans for a viaduct over the railway tracks in the yards at 18th St. The structure will be of steel and reinforced concrete, and will cost about $30,000.

+Houston, Tex.—The City Commissioners have awarded the contract for the construction of a reinforced-concrete bridge over White Oak Bayou at Taylor St. to HORTON & HORTON, at about $21,000. Noted Sept. 3.

Bids will be received until 10 a.m., Sept. 28, by H. L. Washbur, Audr. of Harris County, for the construction of nine concrete bridges.

Fort Worth, Tex.—The Commissioners of Tarrant County have plans for a 300-ft. bridge near Ten-Mile Bridge. The estimated cost is $5525.

Oakville, Tex.—Live Oak County plans the construction of nine creosoted pile trestles, and one steel span. The estimated total cost is $10,000. F. H. Church is County Engr. Bartlett & Ranney, San Antonio, are Consult. Engrs.

Oklahoma City, Okla.—Bids will be received, until Oct. 6, by the Commissioners of Oklahoma County for the construction of a 60-ft. steel or concrete bridge with concrete floor and abutments, repairing 20 bridges and for repainting several bridges. W. W. Storm is Clk. of the Comrs. H. C. Adams is County Engr.

✚**Colorado Springs, Colo.**—(Official)—The Commissioners of El Paso County have awarded the contract for the bridge over Cattle Creek to the MIDLAND BRIDGE CO., Kansas City, Mo., at $4800; the contract for the bridge over Fountain Creek at Nevada Ave. was awarded to the PUEBLO BRIDGE CO., Pueblo, Colo., at $16,200. Noted Aug. 20 and Sept. 17.

Kellogg, Idaho—Plans are being prepared for the construction of a wooden truss bridge over the South Fork of the Coeur d'Alene River at Kellogg. The probable cost will be about $25,000 to be borne by the city and Shoshone County. George R. Trask, Wallace, Idaho, is County Surv. Bids will soon be asked.

Provo, Utah—The following bids were received Sept. 10 by the Commissioners of Utah County for the construction of two steel bridges, (a) over the Provo River at Pleasant View, (b) over the Jordan River near Lehi: Provo Foundry & Machine Co., (a) $4050, (b) $6100; James J. Burke Co., (a) $3498, (b) $5244; Levy Construction Co., (a) $4679, (b) $5087; Midland Bridge Co., (a) $4020, (b) $4380; Minneapolis Steel & Machine Co., (a) $4144, (b) $4774; Parrott Bros. Co., (a) $4527.

Salt Lake City, Utah—A concrete bridge, to cost about $5000, is to be built over the Jordan River, at 21st South St. The cost will be borne equally by the city and Salt Lake County. S. Q. Cannon is City Engr.

✚**McArthur, Calif.**—The Board of Supervisors of Shasta County, Redding, has awarded the contract for a steel bridge over the Pitt River, at McArthur, to WILLIAM STEPHENS, Redding, at $10,995.

✚**Marysville, Calif.**—(Official)—The Board of Supervisors of Yuba County has awarded the contract for the construction of the D St. Bridge across the Yuba River to the CLINTON FIREPROOFING CO., San Francisco, at $134,000. Charles A. Trow, Marysville, is Engr. in Charge. Noted Aug. 20.

Nicolaus, Calif.—The Board of Supervisors of Sutter County, Yuba City, is considering the construction of a bridge over the Feather River, at Nicolaus, to cost about $150,000.

San Bernardino, Calif.—Bids will be received until 11 a.m., Sept. 28, by the Board of Supervisors of San Bernardino County, for the construction of a reinforced-concrete bridge over the west branch of Lytle Creek. Charles Post is County Clk.

✚**Santa Ana, Calif.**—The Board of Supervisors of Orange County has awarded the contract for the construction of a reinforced concrete bridge over the Santa Ana River, on the Anaheim-Olive Road to TROUNCE & STOECKER Owl Drug Bldg., San Diego, at $20,822. Noted Aug. 13.

✚**Stockton, Calif.**—The Board of Supervisors of San Joaquin County has awarded a contract for the construction of a steel bridge near Stockton to JAMES MULCAHY, at $12,680.

WATER SUPPLY—IRRIGATION

Boston, Mass.—Bids will be received by the Metropolitan Water and Sewerage Commission until Sept. 28 for the construction of a brick screen house at East Boston, on Addison St. Charles D. Smith, 1 Ashburton Place, is Ch. Engr.

✚**Clinton, Mass.**—(Official)—Bids were received Sept. 10 for the construction of a concrete dam, 250 ft. long, as follows: R. H. NEWELL CO. and N. S. BROCK, Uxbridge, Mass., at $17,122 (awarded contract); Thomas A. Cassidy, $19,803; Walter L. Mellen, $23,034; Murphy & Hennessy, $18,599; Light, Heat & Power Corporation, $20,841; King Construction Co., $28,207; Ryan & Kean, $21,258; Hancock Engineering Co., $24,928; G. Rossi & Son, $18,675 and Clinton Concrete Co., $17,978. Noted Sept. 10.

Newburyport, Mass.—(Official)—The City Council has approved a bond of $55,000 for the water department, the proceeds of which will be used for the construction of a dam and storage basin in the upper Artichoke River. Lewis D. Thorpe, Boston, is Engr. Noted Sept. 10.

✚★**Hartford, Conn.**—(Official)—Bids were received, Aug. 19, by the Board of Water Commissioners for constructing a road south of the Nepaug Reservoir. The contract has been awarded to LOUIS LONGHI & BRO., Torrington, Conn., at $23,382. C. M. Saville is Ch. Engr., Water Bd. Noted Aug. 27.

Cohoes, N. Y.—The Board of Water Commissioners is having plans prepared by H. W. Taylor, 100 State St., Albany for extensions to the water system. The estimated cost is $40,000. F. V. Kennedy is Clk. of Bd. Noted July 2.

Corning, N. Y.—The Special Water Committee has recommended water supply with ultra violet rays. The estimated cost is $17,500. Lewis N. Lattin is Mayor.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received by William Williams, Comr. Water Supply, Gas and Electricity, until 2 p.m., Sept. 28, for dismantling and transporting two water tube boilers from pumping station No. 1, Borough of Queens, and one steel stack from the Horse Brook pumping station to the Massapequa pumping station and reerecting them.

✚**Sonyea, N. Y.**—The contract for constructing two reservoirs and a pump house for the Craig Colony has been awarded to MORRIS & ALLEN, Builders Exchange, Buffalo. The contract for installing a filtration plant has been awarded to NORWOOD ENGINEERING CO., Florence Mass.

Atlantic City, N. J.—(Official)—Bids will be received by the Board of Commissioners of Atlantic City, until Oct. 1, for increasing the impounding area of the Lower Doughty Pond. Harry Bacharach is Dir. of Pks. and Pub. Property.

Belleville, N. J.—(Official)—Bids will be received by the Town Council until 8 p.m., Sept. 29, for laying 6-, 8- and 12-in. c.i. water mains. Edward E. Mathes is Town Clk.

Madison, N. J.—The Board of Public Works plans to increase the water supply so as to increase the pressure in the higher sections of the town.

Trenton, N. J.—Bids will be received by Frank Thompson, City Clk., until 2:30 p.m., Sept. 25, for laboratory equipment for the filtration plant.

Altoona, Penn.—Press reports state that the Pennsylvania R.R. Co. will build a 1,000,000,000-gal. reservoir at the headquarters of Tipton Run in Blair County. Permission has been granted by the State Water Commission to the Tipton & Blair Water Co., which is a subsidiary of the Pennsylvania R.R., to make this improvement.

Biglerville, Penn.—(Official)—Plans have been prepared and approved for the construction of a gravity supply line and storage reservoir.

Grove City, Penn.—(Official)—Plans have been approved by the State Board of Health for making extensions to the water system. Noted Aug. 27.

Mont Alto, Penn.—(Official)—The citizens will construct a storage reservoir, gravity supply line and distributing system.

Royersford, Penn.—Plans are being prepared by William H. Dechant, Baer Bldg., Reading, for the construction of a pumping plant at Royersford for the Home Water Co.

Shippensburg, Penn.—(Official)—The State Board of Health has approved plans for the construction of a gravity supply line and storage reservoir.

Sykesville, Penn.—Plans have been approved by the State Board of Health for the construction of a municipal water system at Sykesville.

Quitman, Ga.—According to press reports, bonds for the installation of a water system have been voted by the citizens. Noted July 2.

Bay Minette, Ala.—(Official)—An acceptable bid has been made for the purchase of the Bay Minette bonds authorized for the construction of a water system, electric light plant and sewer system. Negotiations will not be completed and the cash will not be on hand by Sept. 30, the time for receiving bids. The bids will probably be called for early in October. Edgar B. Kay, Tuscaloosa, is Ch. Engr. Noted Aug. 20.

Hodgenville, Ky.—(Official)—Bids will be received by W. M. Graham, City Clk., until 7:30 p.m., Sept. 26, for the purchase of bonds for $14,300, the proceeds of which will be used for the installation of a water system. H. E. Read is City Engr. Noted Sept. 10.

Scottsville, Ky.—The City Council will grant a franchise to a company to construct and operate a water system. The City Clerk has information regarding the company.

Sebree, Ky.—An election will be held Nov. 3 to vote on the proposition of issuing bonds for the installation of a water system.

Cleveland, Ohio—Bids will be received by the Commissioners of Purchases and Supplies, City Hall, until noon, Sept. 30, for the removal and re-erection of the Woodland Ave. water tower. Plans are on file with Charles F. Schultz, Comr. of Water Dept.

Lakewood, Ohio—An election will be held November 3 to vote on the proposition of issuing $450,000 in bonds for the construction of a water system and filtration plant. Clayton W. Tyler is Mayor.

Lima, Ohio—(Official)—The W. J. Sherman Co., 613 Nasby Bldg., Toledo, has been retained by the city for consultation work in connection with the proposed increase of the municipal water supply.

Marion, Ohio—The city contemplates issuing bonds for the enlargement of the water works. P. Kelly is Water Works Supt.

✚★**Highland Park, Mich.**—(Official)—Bids were received Aug. 29 by the Village Clerk, for constructing a steel intake crib as follows: JOHN H. BAER, Port Huron, at $49,259 (awarded contract); M. Rabbitt & Sons Co., $74,376; Cullen-Friestedt Co., $71,759; T. L. Durocher, $65,967; Edward Gray, $63,355; Muskegon Dock & Dredging Co., $61,903; A. Q. Thacher Contracting Co., $52,472; Great Lakes Dredging & Dock Co., $49,000; Shirley-Skeldon Dredging & Submarine Construction Co., $40,100 (part); Nash Dowdle Co., $22,741 (part); and John T. Walbridge Engineering Co., $11,067 (part). Gardner S. Williams, Cornwell Bldg., Ann Arbor, Mich. is Engr. Noted Aug. 20.

✚**Joliet, Ill.**—The contract for furnishing an air compressor for the city water works has been awarded to INGERSOLL-RAND CO., Chicago, Ill.

Red Bud, Ill.—On Sept. 8, bonds for $15,000 were voted by the citizens. The proceeds will be used for the construction of a water system. Wilford A. Thompson, 408 Chokia Bldg., East St. Louis, Ill., is the Engr. Noted Aug. 27.

Westville, Ill.—At a recent election the citizens voted $15,000 in bonds, the proceeds of which will be used for the installation of a water system. Noted Aug. 20.

✚**Fond du Lac, Wis.**—The contract for laying new water mains has been awarded to ANTON CHRISTIANSEN, at $6000. Noted Sept. 3.

✚**Madison, Wis.**—The contract for laying water mains in the Fair Oaks district has been awarded to T. H. INGLEHART, Chicago, Ill., at $5180.

Stoughton, Wis.—Bids will be received by L. C. Currier, City Clk., until Sept. 28, for constructing a concrete reservoir. Plans are on file with the City Clerk. Noted July 30 and Aug. 13.

Wabeno, Wis.—Bids will be received by Frank Mischo, Town Clk., until Oct. 1, for constructing a water system. N. H. Smith, Oshkosh, is Engr.

Carroll, Iowa—On Sept. 4 bonds for $25,000 were voted, the proceeds of which will be used for the construction of a water system. Noted Sept. 3.

Goldfield, Iowa—Bonds for $12,000 have been voted by the citizens the proceeds of which will be used for installation of a water system.

Grandmound, Iowa—(Official)—Bids will be received by R. C. Quinn, Town Clk., until Sept. 29 for erecting a 90-ft. steel tower, 50,000 gal. tank, pumping station, deep well pump and for laying about 400 ft. of 8-in. c.-i. water mains. Noted Aug. 13.

✚Sioux Rapids, Iowa—(Official) — The contract has been awarded to DES MOINES BRIDGE & IRON CO., Des Moines. F. H. Diercks is Clk. Noted Aug. 27.

Summit, Iowa—The Council contemplates constructing a water system estimated to cost $8000.

Brookston, Minn.—The citizens have voted $6000 in bonds for the construction of a water system and electric-light plant. Noted Sept. 17.

✚Cuyuna, Minn.—(Official)—The contract for drilling three wells, etc., has been awarded to PASTORET CONTRACTING CO., Duluth, at $5666. G. Anderson is Village Clk. Noted Sept. 10.

St. Paul, Minn.—Bonds for $100,000 have been authorized by the City Council, the proceeds of which will be used making improvements to the water system, including a pump house.

Medicine Lake, Mont.—Press reports state that bonds have been voted by the citizens the proceeds of which will be used for the installation of a water system.

✚Miles City, Mont.—The contract for constructing an irrigation system for the Little Missouri Irrigation Co. has been awarded to TEBBS & TAGGERT, Glasgo, Mont.

✚Palmyra, Mo.—The contract for reconstructing the water works and electric-light system has been awarded to ARROW ENGINEERING CO., St. Louis, Mo., at $28,500. Other bidders were: William A. Pope, $33,333 and L. K. Sherman Co., $34,297. Noted July 16.

El Paso, Tex.—Bids will be received by C. W. Fassett, City Clk., until Sept. 26, for water works machinery. F. H. Todd, 420 Mesa Ave., is Engr.

Lufkin, Tex.—(Official)—Bonds for $25,000 have been voted by the citizens, the proceeds of which will be used for the improvement of the water system including the installation of a filtration system. Noted Aug. 27.

San Antonio, Tex.—See item under Light, Heat and Power.

Roxburg, Idaho—The city contemplates making extensive improvements to its present water system. J. C. Wheeton, Garland, is Engr.

Reno, Nev.—The Lovelock Valley Irrigation District has been formed to construct a canal 20 miles long to drain the Humboldt Sink for irrigation purposes. The estimated cost is $40,000. Thomas Derby, San Jose, Calif., is interested.

Kamas, Utah—Harry S. Joseph has been granted a franchise to construct a water system at Kamas. The estimated cost is $15,000.

North Yakima, Wash.—The Selah Water Users' Association has decided to improve its canal by replacing the wooden flume with reinforced concrete. The estimated cost is $30,000.

Seattle, Wash.—L. Coluccio, Seattle, at $8248, was low bidder for laying water mains in 47th Ave. N. E.

Bandon, Ore.—Bonds for $49,250 have been sold. The proceeds will be used for the installation of a water system.

Burns, Ore.—The city contemplates constructing and water and a sewer system costing $100,000.

Portland, Ore.—Plans have been prepared by John R. Hanson, City Engr., for laying 14,280 ft. of water mains to the Vernon district. The estimated cost is $113,000.

Pasadena, Calif.—A bond issue of $289,000 has been recommended by M. H. Salisbury, Comr. of Pub. Utilities, the proceeds of which to be used for the improvement of the water system.

Santa Ana, Calif.—Bids will be received by the City Trustees, until 5 p.m., Oct. 5, for furnishing a pumping engine and a steam boiler for the water department. J. C. Burke is City Clk.

San Diego, Calif.—The City Council has authorized the construction of a pipe line to connect the Cuyamaca system with the Otay reservoirs. The line will be 30,000 ft. long and will be constructed of 24-in. pipe. The estimated cost is $102,000.

Joliette, Que.—The water system will be improved. Surveyor & Frigon are the Engrs. The estimated cost is $70,000.

✚Toronto, Ont.—The contract has been awarded to TURBINE EQUIPMENT CO., Toronto, for two 24,000-gal. pumps for the pumping station. Noted May 21.

✚Winnipeg, Man.—The contract for 5000 ft. c.i. pipe has been awarded by the Council to CANADA IRON CORPORATION, at $6284.

Regina, Sask.—Water mains and sewers will be laid by the City Council. The estimated cost is $20,000. F. McArthur is Engr.

SEWERS

Boston, Mass.—Bids will be received, until Sept. 24, for constucting sewers in Mt. Ida Road, Blue Hill Ave. and in Deering Road, Dorchester District. L. K. Rourke is Comr. of Pub. Wks.

✚The contract for constructing a sewer in Milton and Hamilton Sts., Hyde Park Dist., has been awarded by the Public Works Department, to A. DADDARIO, at $12,898. Noted Sept. 10.

Northampton, Mass.—On Sept. 9 the Sewer Commissioners voted to construct a surface water sewer from Fair St. through the meadows back of Pomeroy Terrace.

East Hartford, Conn.—Bids are being received by the Commissioners of the East Hartford Fire District for laying 6800 ft. of 8- and 12-in. sewers. Plans are on file with E. H. Olmstead, Engr.

✚Hartford, Conn.—The Board of Contract and Supply has awarded a contract to PROSPERO BORNADIES & CO. for the construction of a section of sanitary sewer at $6788.

✚Waterbury, Conn.—The contract has been awarded by the Board of Public Works to BARBARA & D'AURIO CO., 63 Bank St., Waterbury, for building three sections each of sanitary and storm sewers.

Binghamton, N. Y.—Bids were received by the Board of Contract and Supply for the construction of a sewer along the south bank of the river, as follows: B. L. Gabriel, $14,165; George Pignatello, $18,350, and Tyne & Willey, $19,008. Noted Aug. 6.

Fairport, N. Y.—(Official)—Bids will be received by the Village Board, until Sept. 30, for constructing about 12,000 ft. of sewers. C. F. Fisher is Village Engr.

Greenwood Lake Glens (Lakeside post office), **N. J.**—Bids will be received by R. M. Ekings, 152 Market St., Paterson, until Sept. 26, for constructing a sewage system for the Ringwood Co., at Greenwood Lake Glens. Plans are on file at the office of H. J. Harder, City Engr., Paterson.

Plainfield, N. J.—Bids will be received by the Sanitary Sewerage Commission, until Oct. 7, for the construction of a sewer system and sewage-disposal plant in Piscataway Township. The work will be done jointly by Plainfield, North Plainfield and Dunellen. Noted Sept. 17.

Cresco, Penn.—(Official)—Robinson & Wagner, 37 East 28th St., New York, N. Y., are preparing plans for enlarging the sewage-disposal plant at Buckhill Falls.

Greenville, Penn.—(Official)—The Council has had plans approved for the construction of preliminary treatment tanks with disinfection apparatus for the sewer system.

Montrose, Penn.—(Official)—The Department of Health has approved plans for the construction of lateral sewers and preliminary treatment tanks and disinfection apparatus.

✚North Wales, Penn.—(Official)—Bids were received Sept. 5, by the Borough Council, for constructing a sewage-disposal plant and sewer system, as follows: CANTRELL CONSTRUCTION CO., Real Estate Trust Bldg., Philadelphia, at $49,983 (awarded contract); Edward L. Bader, $140,292; Keeley-McFeeley Co., $71,525; Suburban Contracting Co., $64,725. Ralph Schafenacker is City Engr. Noted Aug. 27.

Troy, Penn.—(Official)—A sewer system and preliminary treatment tanks with disinfection apparatus will be installed at Troy.

West Chester, Penn.—The Sewer Committee contemplates constructing sanitary sewers in all streets north of Gay St. H. R. Guss is one of the Comm.

✚Charleston, W. Va.—Bids were opened, Sept. 10, by the Board of City Affairs for constructing a sewer system. Contracts have been awarded to JAMES FERRY & SONS, Baltimore, Md., at $73,463 for Dist. No. 1, at $12,516 for Dist 2, and at $22,912 for Dist. 4: and to C. M. SCANLON CONTRACTING CO., Huntington, at $48,107 for Dist. 3. Noted Sept. 31.

Lafayette, Ga.—The city contemplates constructing a sewer system estimated to cost $17,000.

Miami, Fla.—Bids will be received until Oct. 15 for constructing 8- to 24-in. sanitary sewers. B. H. Klyce, Real Estate Bldg., Miami, is Engr.

New Smyrna, Fla.—An election will be held in January to vote on the proposition of issuing $16,000 in bonds the proceeds of which will be used for the construction of a sewer system. J. B. McCrary Co., Atlanta, Ga., is the Engr.

Bay Minette, Ala.—(Official)—See item under "Water Supply and Irrigation."

Okolona, Miss.—Surveys for the construction of sewers are being made. The estimated cost is $60,000. Frank L. Wilcox, Chemical Bldg., St. Louis, Mo., is Engr.

Nashville, Tenn.—The City Commissioners have appropriated $14,000 for the construction of a trunk sewer in 28th Ave. W. W. Southgate is City Engr.

✚Bowling Green, Ohio—The contract for installing a sewer system at the State Normal College, Bowling Green, has been awarded to HUFFMAN CONKLIN CO., Columbus, at $5241.

✚Centerburg, Ohio—The contract has been awarded by the Village Council to NATIONAL CO., South Bend, Ind., for constructing a sewer in Main St.

Cincinnati, Ohio—(Official)—Bids will be received by Philip Fosdick, Dir. of Pub. Serv., until noon, Sept. 30, for constructing a sewer in Mill Creek intercepter from Dane St. to Mitchell Ave., under Contract No. 3.

Cleveland, Ohio—Bids will be received by the Commissioner of Purchases and Supplies, until noon, Sept. 30, for constructing sewers in Rexford Ave., East 120th St. and Trowbridge Ave. Plans are on file with Robert Hoffman, City Engr.

Columbus, Ohio—Bids will be received by S. A. Kinnear, Dir. of Pub. Serv., until noon, Oct. 12, for motor-driven centrifugal pumping machinery, including pumps of 5,000,000, 10,000,000 and 15,000,000 gal. capacity.

Bids will be received by S. A. Kinnear, Dir. of Pub. Serv., until noon, Sept. 29, for constructing a storm sewer in Eldron Ave. and sewers in Steele and Shoemaker Aves., and in three alleys.

East Liverpool, Ohio—(Official)—Bids will be received by the Public Service Director, until noon, Sept. 26, for constructing a 6-in. sanitary sewer in Hubbard, Burford and Alton Sts. E. J. Smith is Dir.

✚East St. Louis, Ill.—The contract for constructing a sewer in Eighth St. has been awarded to CHARLES RICH at $8500.

Kewaunee, Wis.—Emil E. Seidenglanz, Chmn. Bd. of Pub. Wks., will soon receive bids for the construction of 6½ blocks of vitrified pipe or concrete sewer in Milwaukee St.

✚**Council Bluffs, Iowa**—A contract for constructing 26,000 ft. of sewer has been awarded to E. A. WICKHAM.

Creston, Iowa—Bids will be received by the City Clerk, until Sept. 30, for constructing 6-, 8- and 10-in. sanitary sewers in several streets. T. S. Delay is City Engr.

Oelwein, Iowa—According to press reports, bids will be received by the City Council, until Sept. 28, for the enlargement of the filter beds. The estimated cost is $7000. I. E. Odendahl is City Engr.

Minneapolis, Minn.—According to press reports, the city contemplates a $100,000 bond issue for sewer construction.

✚**Brainerd, Minn.**—Contracts have been awarded for constructing sewers in the northeast section to F. A. GLASS, and in District No. 3 to ILSTRUP & OLSON.

Dundee, Neb.—An election will be held Oct. 3 to vote on the proposition of issuing $30,000 in bonds for sewer construction.

✚**Aberdeen, S. D.**—The contract for constructing storm sewers in 10th and First Aves. has been awarded to L. W. SCHRUTH, Fargo, at $11,436 and $46,511, respectively.

Grand Forks, N. D.—Bids will be received by W. H. Alexander, City Audr., until 4 p.m., Oct. 5, for constructing a 12-in. vitrified-pipe sewer, 613 ft. long, and two manholes.

Great Falls, Mont.—According to press reports, bids will be received by W. H. Harrison, City Clk., until Oct. 1, for constructing 3000 ft. 9-in. sanitary sewer. M. L. Morris is City Engr.

✚**Houston, Tex.**—The contract for constructing a sewer in Orriene St. has been awarded to HORTON & HORTON, at approximately $9500. Noted Sept. 10.

✚**Laredo, Tex.**—A contract for constructing 24- and 30-in. storm sewers has been awarded to A. DEUTZ & BRO., at $24,000. Noted Sept. 3.

San Antonio, Tex.—See item under Light, Heat and Power.

Aberdeen, Wash.—Lewis D. Kelsey, City Engr., has been authorized by the City Council to prepare plans for constructing a trunk sewer to serve the district west of Division St.

Ruston, Wash.—Bids will soon be received for installing a sewer system to cost $5000. L. A. Nicholson, 506 Fidelity Bldg., Tacoma, has prepared the plans.

Burns, Ore.—See item under "Water Supply and Irrigation."

✚**Monroe, Ore.**—A contract for constructing the main sewer has been awarded by the City Council to M. SWARTELY, Cornvallis.

Corte Madera, Calif.—The Corte Madera Sanitary Board, 704 Pacific Bldg., San Francisco, plans an expenditure of $7500 for the installation of a sewer system in this city.

Huntington Beach, Calif.—Bids will be received by the City Trustees, until 8 p.m., Sept. 28, for constructing a portion of the proposed 3030 ft. 16-in. vitrified pipe and 4500 ft. 10-in. pipe; average cut, 14 ft. The work now ready will cost about $20,000.

✚**Los Angeles, Calif.**—The contract for constructing a sewer in Vermont Ave. has been awarded to ADAM DALMATIN, at $5471.

Richmond, Calif.—H. D. Chapman, City Engr., is preparing plans for an extended sewer system in the western section of the city.

San Bernardino, Calif.—Bids will be received by S. G. Batchelor, City Clk., until 7:30 p.m., Oct. 5, for constructing approximately 416 ft. of 8-in. vitrified pipe sewer along L St., together with two manholes, one flush tank, and twenty-six 8x4-in. Y's of vitrified pipe.

✚**San Francisco, Calif.**—The contract for constructing a sewer in Glen Park has been awarded to KARL EHRHARDT, at $13,649.

Visalia, Calif.—The city contemplates constructing a septic tank, filter beds and disenfecting plants on the city sewer farm. The estimated cost is $60,000.

London, Ont.—Bids are now being received by W. N. Ashplant, Engr., for constructing sanitary sewers in five streets.

Thorold, Ont.—The Town Council will soon receive bids for constructing sewers in Elgin, Queen, Richmond, Albert and Metcalfe Sts. D. J. Munroe is Town Clk.

✚**New Westminster, B. C.**—The contract for constructing the Sapperton sewer system has been awarded to ROBERT McLEAN & CO., Pacific Bldg., Vancouver, at $76,312. Other bids were: H. P. Peterson, $91,952; John Galt Construction Co., $91,718.

Vancouver, B. C.—The City Council will construct sewers on the following streets: Alma Road, Trinity St., Carolina St., at $15,000, $6500, $8500, respectively.

GARBAGE

Columbus, Ohio—(Official)—Bids will be received until noon Sept. 29 by the Director of Public Service for the erection of an incinerator for the disposal of rubbish. Plans on file in the office of the director. T. D. Banks, City Hall, is Supt. of Garbage Disposal, Dept. Pub. Ser.

Vallejo, Calif.—The City Commission plans the erection of a garbage incinerator to cost about $8000. William P. Blake is Comr. of Pub. Health.

Toronto, Ont.—The city council has decided to erect a garbage disposal plant. The estimated cost is $48,000. Plans will be prepared at once. H. C. Hocken is Mayor.

STREETS AND ROADS

Boston, Mass.—Bids will be received by the Board of Public Works, until Sept. 28, for constructing a pavement on Frankfort St., East Boston. L. K. Rourke is Comr.

✚The contract for the construction of 2400 lin.ft. of concrete state road in Somerville has been awarded to JAMES A GAFFEY, of Medford, at $8138. Other bids were: Coleman Bros., $9220; J. H. Broderick, $9692; D. J. Sheehan, Lynn, $10,119; Rowe Contracting Co., $10,677; J. C. Coleman & Sons Co., $10,908; J. H. Fannon & Sons Co., $11,328; H. J. McGuire, Worcester, $11,723; James H. Ferguson, $13,005.

✚The contract for artificial stone sidewalks in Washington and Cambridge Sts., Brighton District, has been awarded to JOHN KELLY CO., at $5598. Other bids were: Charles Jacobs Co., $5725; John F. Beatty, $5733; Martino De Matteo, $5749; Thomas W. Allen, $5972; James Doherty, $6068; John L. Lane, $6087; John McCourt Co., $6180; Michael D. Russo, $6320; William J. Rafferty Co., $7082. Noted Sept. 10.

✚The contact for paving Station St. with bitulithic has been awarded to JOHN F. BEATTY, at $5495. Other bids were: Martino De Matteo, $5766; James Doherty, $5923; Warren Bros. Co., $6020; Charles B. Telless, $6328. Noted Sept. 10.

✚**Holyoke, Mass.**—The contract has been awarded to P. J. KENNEDY for paving a section of Cabot St. with asphalt blocks. Noted Sept. 3.

✚**Hartford, Conn.**—The contract for the construction of about 6500 lin.ft. gravel road on the Clayton highway, North Canaan Township, has been awarded to LOUIS LOUGHI & BRO., Litchfield, at about $8900. Noted Aug. 6 and 27.

Hartford, Conn.—Sealed proposals for state road work were received b ythe State Highway Commissioner, Sept. 15, as follows:

New Milford Township, about 15,225 lin. ft. (a) native stone macadam, (b) gravel-trap rock, (c) limestone-trap rock, (d) gravel resurfacing, (e) limestone resurfacing, (f) native stone resurfacing. A. D. Pierce Jr. Co., Bridgeport, (a) $44,803, (b) $40,786, (c) $40,786, (d) $12,117, (e) $1912, (f) $1887; Edmund P. Wall, Torrington, (a) $39,055, (b) $29,321, (c) $30,905, (d) $2423, (e) $2314, (f) $2501; H. H. Burleson, Bridgeport, (a) $37,071.72, (b) $29,759.22, (c) $40,619, (d) $4338, (e) $4113, (f) $3431; A. Sanford Osborn, Redding, (a) $45,216, (b) $35,681, (c) $41,111, (d) $2930, (e) $2795, (f) $2517; A. Brazos & Sons, Middletown, (a) $43,684, (b) $32,831, (d) $2326, (f) $2906; John de Michiel & Bro., Torrington, (a) $45,589, (b) $36,157, (c) $36,000700; (d) $3179, (e) $3009, (f) $2979; Louis Loughi & Bro., Torrington, (a) $42,807, (b) $33,510, (c) $34,325, (d) $2849, (e) $2887, (f) $2897; Goodman & Trumbull Co., Litchfield, (a) $42,024, (b) $30,732, (c) $35,619, (d) $1890, (e) $2030, (f) $1969; A. D. Bridge's Sons, Hazardville, (a) $43,223, (f) $1953; Bennett N. Beard Co., Shelton, (a) $44,279, (b) $36,873, (c) $38,231, (d) $2531, (e) $2378, (f) $2532; R. G. Miller Contracting Co., Hartford, (a) $35,467, (b) $33,195, (c) $34,010, (d) $2580, (e) $2413, (f) $1754; Olin T. Benedict, Pittsfield, Mass., (a) $40,748, (b) $36,681, (c) $36,681, (d) $2139, (e) $2020, (f) $1788; Also 2940 lin.ft. trap rock macadam, (a) gravel-trap rock (b) or limestone-trap rock construction on Popean and East St.; H. Sanford Osborn, Reading, (a) $6905, (b) $8231, (c) $8231; A. D. Brogea Sons, Hazardville, (a) $7540; Edmund P. Wall, Torrington, (a) $6504, (b) $5608, (c) $5712; A. Brazos & Sons, Middletown, (a) $7618, (b) $7127; Kellogg & Gregory Co., Danbury, (a) $7589; John de Michiel & Bro., Torrington, (a) $7032, (b) $5497, (c) $5497; Goodman & Trumbull Co., Litchfield, (a) $7378, (b) $7200, (c) $7728; Louis Loughi & Bro., Torrington, (a) $7444, (b) $7533, (c) $7533; B. W. Pierce Jr., Co., Bridgeport, (a) $3220, (b) $8166, (c) $8532; Bennett & Beard Co., Shelton, (a) $7205, (b) $7364, (c) $7364; Olin T. Benedict, Pittsfield, Mass., (a) $6373, (b) $6653, (c) $6653.

Washington Township—about 1500 lin.ft. native stone macadam road and a 50-ft. span reinforced concrete bridge. Edmund P. Wall, Torrington, $10,459; Goodman & Trumbull Co., Litchfield, $11,977; Caesar A. Rossi, Torrington, $11,944; John de Michiel & Bro., Torrington, $11,147; Kellogg & Gregory Co., Danbury, $11,367; Louis Loughi & Bro., Torrington, $14,345; H. H. Burleson, Bridgeport, $11,078.

Berlin Township, 3580 lin.ft. trap rock macadam on the Cromwell Road. Stafford & Mather, Hartford, Conn., $7189; Piersen Engineering & Construction Co., Hartford, $8716; Connecticut Good Roads & Construction Co., New Britain, Conn., $9099; B. D. Pierce Jr., C., Bridgeport, $10,597; Curran Corporation, Middletown, $7148; A. D. Bridge's Sons, Hazardville, $7779; A. Brazos & Sons, Middletown, $7677; A. B. Cadwell, New Britain, $8494; W. L. Immich, Meriden, $8613; Leonardo Suzio, Meriden, $9019.

Darien Township, about 500 lin.ft. reinforced concrete washed sand, (a) unwashed sand, (b) reinforcement, (c). Leonardo Suzio, Meriden, (a) $15,512, (b) $15,270; Connecticut Good Roads & Construction Co., New Britain, (a) $16,902, (b) $11,644, (c) $1333; W. H. Arthur, Stamford, (a) $15,440, (b) $14,921, (c) $1066; Fairfield Landscape & Nurseries Co., 103 Park Ave., New York, N. Y., (a) $15,928, (b) $15,064; B. D. Pierce, Jr. Co., Bridgeport, (a) $15,743, (b) $15,397.

Norwich Township, about 5050 lin.ft. trap rock resurfacing on Norwich Ave. Olin T. Benedict, Pittsfield, Mass., $6918; A. D. Bridge's Sons, Hazardville, $6387; F. A. Wilcox, Norwich, $6832; William B. Wilcox, Norwich, Conn., $6396; Goodman & Trumbull Co., Litchfield, $6847; Leonardo Suzio, Meriden, $7614.

Thompson Township, about 3754 lin.ft. plain concrete washed sand, (a) plain concrete unwashed sand, (b) on the Grosocordale Road. A. Vito Construction Corporation, Thompson, (a) $9863, (b) $9668. Piersen Engineering & Construction Co., Hartford, (a) $10,848, (b) $10,524; C. W. Crockett & Co., Torrington, (a) $12,638, (z) $11,340; Goodman & Trumbull, Litchfield, (a) $11,484, (b) $10,835.

City of New Britain, about 7556 lin.ft. plain concrete washed sand, (a) plain concrete unwashed sand, (b) A. C. Sternberg, Jr., Construction Co., West Hartford, (a) $19,378, (b) $18,725; Piersen Engineering & Construction Co., Hartford, (a) $17,793, (b) $17,310; Olmsted & Olmsted, East Hartford, (a) $20,501; (b) $19,648; Connecticut Good Roads & Construction Co., New Britain, (a) $19,516, (b) $18,095; John P. Dugan Co., Amsterdam, N. Y., (a) $20,852, (b) $19,999; Baker & Lasher Inc., New Britain, (a) $17,991, (b) $17,552; Louis Loughi & Bro., Torrington, (a) $22,906, (b) $22,338; Leonard Suzio, Meriden, (a) $20,053, (b) $19,741. Also about 4550 lin.ft. trap rock macadam (a) or gravel (b) on South Stanley St. Louis Loughi & Bro., Torrington, (a) $13,358, (b) $12,794; J. J. Donahue, New Britain, (a) $12,920, (b) $9762; A. Brazos & Sons, Middletown, (a) $13,896; Amos D. Bridge's Sons, Hazardville, (a) $11,794; A. B. Cadwell, New Britain, (a) $10,023; Connecticut Good Roads & Construction Co., New Britain, (a) $12,749, (b) $9368; John P. Dugan Co., Amsterdam, N. Y., (a) $11,569; Olmsted & Olmsted Inc., East Hartford, (a) $12,981; Piersen Engineering & Construction Co., Hartford, (a) $12,823; Thomas Kearney, Meriden, Conn., (a) $11,796; Louis Loughi & Bro., Torrington, (a) $14,223.

Harwinton Township, about 4161 lin.ft. native stone macadam on the Torrington Road. Edward P. Wall, Torring-

ton, Conn., $12,637; Goodman & Trumbull, Litchfield, Conn., $13,219; A. B. Cadwell, New Britain, Conn., $11,873; A. D. Bridge's Sons, Hazardville, Conn., $14,120; John de Michiel & Bro., Torrington, Conn., $11,627; Caesar A. Rossi, Torrington, Conn., $12,324.

Clinton Township, about 1663 lin.ft. concrete with washed sand, (a) unwashed sand, (b) reinforcement, (c) on the Main St.; Bristow Brothers & Knowles Corporation, Narragansett Pier, R. I., (a) $5133, (b) $4960; Piersen Engineering Construction Co., Hartford, (a) $5170, (b) $5026; Curran Corporation, Middletown, $4957, (b) $4727, (c) $295; Frank Arrigoni & Bro., Middletown, (a) $4895, (b) $4493; A. D. Bridge's Sons, Hazardville, (a) $5348, (b) $5060; B. D. Pierce, Jr. Co., Bridgeport, (a) $5588, (b) $5502.

Ridgefield Township, about 11,796 lin.ft. native stone (a) or gravel, (b) on the Danbury Road. Olin T. Benedict, Pittsfield, Mass., (a) $32,126, (b) $23,673; H. Sanford Osborn, Redding, (a) $32,749, (b) $24,008; Framingham Contracting Co., So. Framingham, Mass., (a) $30,614, (b) $23,390; Bennett N. Beard Co., Shelton, (a) $37,547, (b) $28,756; Capito & Giovaninni, 178 North St. Boston, Mass., (a) $31,795, (b) $21,591; A. Vito Construction Corporation, Thompson, (a) $30,375, (b) $22,888; Goodman & Trumbull Co., Litchfield, (a) $32,471, (b) $21,492; Charles W. Tryon, Meriden, (a) $29,672, (b) $23,296; A. D. Bridge's Sons, Hazardville, (a) $32,282; Kellogg & Gregory Co., Danbury, (a) $30,954, (b) $24,850; A. B. Cadwell, New Britain, (a) $28,808; John de Michiel & Bro., Torrington, (a) $33,137, (b) $23,955; B. D. Pierce Jr. Co., Bridgeport, (a) $32,632, (b) $23,346; Leonardo Suzio, Meriden, (a) $38,652; Lane Construction Corp. Meriden, (a) $34,211. Noted Sept. 10.

✚Naugatuck, Conn.—The contract for paving Church St., from Rubber Ave. to Maple St., has been awarded to EDWARD P. TRACY, Derby, at $2.48 per sq.yd. The only other bid was that of C. W. Blakeslee & Sons, New Haven, at $2.25 per sq. yd. About 4580 sq. yd. will be required. Noted Sept. 10.

★✚Amsterdam, N. Y.—The contract for paving Prospect, Grove, Schuyler and Shuler Sts., has been awarded to J. DIMANDO, Mamaroneck, at $7240, $5791, $4880 and $6823. Other bidders were: S. I. Foster, Thomas R. Crane, Flood & Van Wirt, Union Paving Co. Noted Aug. 10.

✚Buffalo, N. Y.—The contract for the repaving of Hudson St. has been awarded to the HENRY P. BURGARD CO.

✚Granville, N. Y.—The contract for paving East Main St. with brick has been awarded to JOHN B. DOWER, Ballston Spa, at $15,853.

New York, N. Y.—(Borough of Queens)—(Official)—Bids will be received until 11 a.m., Sept. 28, by Maurice E. Connolly, Pres., Borough of Queens, Borough Hall, for grading, curbing and laying sidewalks on Thomson Ave., from the viaduct to Diagonal St.

✚Syracuse, N. Y.—The contract for paving Pond St. has been awarded to JOHN YOUNG, at $26,675.

Harrison, N. J.—The Otis Elevator Co. will pave First St., from Middlesex to Somerset St., with 3-in. asphalt paving.

Mays Landing, N. J.—The Board of Freeholders of Atlantic County has approved plans for the paving of the Meadowbrook Blvd. The approximate cost is $135,000. A. H. Nelson, Atlantic City, is Engr. in Charge.

Newton, N. J.—The Board of Chosen Freeholders of Sussex County is considering the improvement of the direct Newton-Sparta Road, at an estimated cost of about $12,000 per mile. Harvey Snook is County Engr.

✚Passaic, N. J.—The contract for paving Central Ave. has been awarded to the UNION BUILDING & CONSTRUCTION CO.

✚Trenton, N. J.—The contract for constructing the White Horse Road has been awarded to the NEWTON PAVING CO., at $9200.

Chester, Penn.—B. G. Ladamus, Law Bldg., Engr., is preparing plans for street improvements. The approximate cost of the work is $40,000.

Harrisburg, Penn.—(Official)—Bids will be received by the Department of State Highways, until 10 a.m., Oct. 6, for reconstructing 1050 lin.ft. of road in Tionesta Borough, Forest County.

✚Philadelphia, Penn.—The contract for repaving Arch St. has been awarded to J. JOSEPH McHUGH, at $8965.

✚Scranton, Penn.—A contract for paving has been awarded to the WARNER-QUINLAN CO., Coal Exchange Bldg., Wilkes-Barre.

Wilkinsburg, Penn.—(Official)—Bids will be received by Frease & Sperling, Borough Engineers, Carl Bldg., until 4 p.m., Sept. 26, for constructing concrete sidewalks on Penn Ave., Pitt and Hay Sts.

Baltimore, Md.—Bids will be received until Sept. 30, by the Board of Awards, City Hall, for paving McEldery St., Lindenwood Ave., and Loney's Lane, Contract 95. R. Keith Compton is Chmn. Paving Comm.

Quitman, Ga.—At an election held Sept. 7 the citizens voted on the proposition of issuing $35,000 in bonds for paving.

Titusville, Fla.—Bids will be received by J. P. Wilson, City Clk., until Oct. 6, for improving a portion of Tropic St.

Gadsden, Ala.—An election will be held Nov. 3 to vote on the proposition of issuing $200,000 in bonds for road construction.

Hamilton, Ala.—Bids will be received by the Board of County Commissioners, until Oct. 6, for grading and draining approximately 50 miles of road. S. E. Neill is Highway Engr.

✚Chicago Junction, Ohio—(Official)—The contract for paving Spring St. has been awarded to LEE BROS., Clyde, at $24,869. Noted Aug. 13.

Chillicothe, Ohio—Bids will be received by R. B. Alexander, Audr. of Ross County, until Sept. 28, for the improvement of 1700 lin.ft. of the Clarksburg Pike.

Cincinnati, Ohio—(Official)—Bids will be received by the Board of Commissioners, until noon, Oct. 16, for repairing a part of the Ohio Pike.

(Official)—Bids will be received by Philip Fosdick, Dir. Pub. Ser., until noon, Sept. 30, for improving Bishop St. from Lakewood Ave. to St. Clair St.

Cleveland, Ohio—Bids will be received by the City Council, until Sept. 28, for the paving of Front Factory St.

✚Coshocton, Ohio—Contracts have been awarded for paving North Fifth St. to T. J. NORMAN & SON, Hickory St., to J. BOCK & SON.

✚Columbus, Ohio—Contracts have been awarded for paving Third and Starr Aves. to the CLEVELAND TRINIDAD PAVING CO., Reynolds Ave., to B. F. PATTERSON, Bryden Road, to W. M. GRAHAM and Buckingham St., to A. W. BURNS & CO.

Jefferson, Ohio—Bids will be received by the Commissioner of Ashtabula County until 1 p.m., Oct. 5, for grading, draining and paving East and West Road in Rome and Hargrove Townships. A. V. Hillyer is Clk.

Lorain, Ohio—(Official)—Bids will be received by L. B Johnston, Dir. Pub. Ser., until noon, Sept. 29, for improving Oberlin Ave.

Marion, Ohio—Bids will be received by C. H. Apt, City Clk., until Sept. 29, for paving Marion St.

✚Napoleon, Ohio—The contract for paving Hobson St. with vitrified brick has been awarded to JOHNSON & RITZ, at $8068.

Niles, Ohio—Bids will be received by Homer Thomas, until Oct. 12, for the sale of bonds for $16,000, $3217, $12,300, $10,500, $15,558 and $4500 for street paving.

Sharonville, Ohio—(Official)—Bids will be received by Joseph Wright, Village Clk., until noon, Oct. 3, for improving Maple St., from Sycamore St. to Cornell Ave.

Swanton, Ohio—Bids will be received by William B. Elwell, Village Clk., until noon, Oct. 8, for paving North Main St. George Champe, Toledo, is Engr. in Charge.

✚Toledo, Ohio—The contract for the paving of Bancroft St. has been awarded to the ASPHALT BLOCK PAVING CO., at $7426.

✚Zanesville, Ohio—The contract for paving Jefferson and Madison Sts. has been awarded to ADAMS BROS. Noted Sept. 3.

Indiana—(Official)—Bids will be received as follows for road improvements in Indiana:

Rensselaer, until 2 p.m., Oct. 6, by the Commissioners of Jasper County for constructing a stone road in Kankakee Township. J. P. Hammond is Audr.

Rochester, until noon, Oct. 6, by the Commissioners of Fulton County for constructing two roads in Liberty Township.

Winamac, until noon, Oct. 6, by the Commissioners of Pulaski County for constructing roads in Van Buren, Tippecanoe and Monroe Townships. W. E. Munchenburg is Audr.

Valparaiso, until 10 a.m., Oct. 10, by the Commissioners of Porter County for constructing a gravel road in Central Township.

Greensburg, until 1 p.m., Oct. 12, by the Commissioners of Decatur County for constructing a crushed stone road in Sand Creek Township. Linton W. Sands is Audr.

Rochester, Ind.—(Official)—An election will be held, Oct. 13, to vote on the proposition of issuing $125,000 in bonds for road construction.

✚Kalamazoo, Mich.—The contract for resurfacing East and West Vine St., Patterson St. and Woodland Ave. has been awarded to S. S. SAXTON CO., Richmond, Ind.

Springfield, Ill.—(Official)—Bids will be received by the State Highway Commission, until 11 a.m., Sept. 29, for the following road construction, all cement to be furnished by the state: Fayette County, Route 6, Sect. A, 7065 lin.ft. of concrete, estimated cost, $11,410; Schuyler County, Route 5, Sect. A, 5400 lin.ft. of concrete, estimated cost, $6766; Tazewell County, Route 10, Sect. D, 4000 lin. ft. of concrete, estimated cost, $7914; Whiteside County, Route 6, Sect. A, 2800 lin.ft. of concrete, estimated cost $7475; Road Island County, Route 11, Sect. A, 4969 lin. ft. of concrete, estimated cost, $7270.

✚Berlin, Wis.—The contract for paving Broadway with concrete has been awarded to C. JOHNSON, Oshkosh.

Manitowoc, Wis.—Bids will be received by Arthur Reichert, City Clk., until Oct. 5, for paving portions of 25th and North 12th Sts. with macadam.

✚Sheboygan, Wis.—The contract for paving Bluff Ave. with concrete has been awarded to the BIRDSALL-GRIFFITH CONSTRUSTION CO., Racine, Wis., at $19,695.

✚Bettendorf, Iowa—A contract for paving 2589 sq.yd. with concrete has been awarded to A. KORNEMANN, Muscatine.

✚Council Bluffs, Iowa—A contract for constructing 19,350 lin.ft. of combined curb and gutter, 40.057 sq.ft. paving, has been awarded to P. NELSON, 727 West Washington Ave., at $40,057. Noted Aug. 27.

✚Davenport, Iowa—The contract for resurfacing Ripley St. has been awarded to the CENTRAL ENGINEERING CO., at $6170.

✚Le Mars, Iowa—A contract for paving several blocks of Main St. has been awarded to M. L. FLYNN CO., Sioux City.

✚Blue Earth, Minn.—A contract for paving five blocks of Main St. has been awarded to the NORTH STAR CONCRETE CO., Mankato.

✚St. Paul, Minn.—The contract for grading Blair St., from Syndicate to Lexington Ave., has been awarded to R. D. MALONE, at $5015.

✚Lincoln, Neb.—A contract for paving District 65 has been awarded to C. W. BEANS.

Omaha, Neb.—(Official)—Bids will be received by Thomas J. Flynn, City Clk., until 9 a.m., Sept. 29, for improving several streets.

Missoula, Mont.—All bids for grading, curbing, laying sidewalks and paving of Stevens St. have been rejected by the City Council, and new bids will be asked. The lowest submitted was that of J. C. McGuire, for asphaltic concrete, $23,495.

St. Joseph, Mo.—All bids received Sept. 4 by the Board of Public Works for paving the highway from Seventh St. and Highland Ave. to Second St. and Hamburg were rejected. Bids will be readvertised.

Caldwell, Tex.—The City Council has ordered an election to be held Oct. 13, to vote on the proposition of issuing $12,000 in bonds for street paving.

✚Dallas, Tex.—The contract for paving Hall, Washington, Hawkins, Crowdus, Jackson, Race, Broome, Lamar and Bryan Sts. has been awarded to the TEXAS BITULITHIC CO., Dallas.

✚Lockhart, Tex.—The contract for repairing 18 miles of graded roads on the San Marcos and Kyle Road has been awarded to VAN B. FLOWERS.

Lufkin, Tex.—At the election held Sept. 10, $40,000 in bonds for street paving were sold. Noted Aug. 27.

St. Johns, Ariz.—The citizens recently voted on the proposition of issuing $125,000 in bonds for the improvement of county roads.

Bellingham, Wash.—The Commissioners of Whatcom County are having estimates pepared for laying permanent surface on Guide Merdian Road, for a distance of about 2½ miles beyond the city limits.

✚Port Townsend, Wash.—A contract for constructing permanent highway No. 2 has been awarded to P. H. ERICKSON, Brinnon, at $7279. Noted Aug. 27.

Seattle, Wash.—Bids will be received by the Commissioners of King County, until Sept. 29, for constructing the Issaquah-Fall City Road.

✚Bay City, Ore.—The City Trustees have awarded a contract for the grading and surfacing of 24 blocks in the downtown district to the TILLAMOOK BAY CONSTRUCTION CO., at $36,007.

✚Oregon City, Ore.—The contract for paving Division St. has been awarded to J. W. SHEA.

Alameda, Calif.—The city will spend $100,000 for the improvement of Central Ave. and portions of Park and Webster Sts.

✚Coronado, Calif.—The contract for improving Ocean Blvd. has been awarded to the FAIRCHILD-GILMORE-WILTON CO., at $38,886.

✚Eagle Rock, Calif.—The contract for improving portions of Eagle Rock Road, Eagle Rock Ave. and Wiota St. has been awarded to PETER L. FERRY, 526 West Acacia St., Tropico, at $32,310.

✚Los Angeles, Calif.—The contract for improving Western Ave., from Los Felix Road to Franklin Ave., has been awarded to R. H. McCRAY, Jr., at $4981.

✚Richmond, Calif.—The City Council has awarded the contract for paving Soto Ave. to FRANK AGUIAR, at $14,221.

Sacramento, Calif.—Bids will be received by the State Hhighway Commission until 2 p.m., Oct. 5, for constructing roads in various counties as follows: Imperial County, from Myers Creek to Coyote Wells, about six miles; Santa Barbara County from Zacat Station to Los Alamos, about 8.7 miles of concrete; San Luis Obispo County from San Luis Obispo Creek to Cuesta, about 3.6 miles; Alameda County from easterly boundary to Altamount, about 5.9 miles of concrete paving; Humboldt County from Loleta to Beatrice, about 4.3 miles; Humboldt County from Shively to Jordan Creek, about 3.7 miles.

✚Sacramento, Calif.—The State Highway Commission has awarded contracts for highway work as follows: Kern County, from Southerly boundary to a point 2.3 miles south of Rost station, to the A. C. McCLEAN CONSTRUCTION CO., San Francisco, at $68,004; Kern County, to LYNN S. ATKINSON, Los Angeles, at $174,346; Santa Barbara County, to the ARTHUR S. BENT CONSTRUCTION CO., Los Angeles, at $61,226. Noted Aug. 13 and Sept. 17.

San Bernardino, Calif.—Bids will be received by S. G. Batchelor, City Clk., until 7.30 p.m., Oct. 5, for improving portions of Sixth St., from B to I St., F St. from Rialto Ave. and Second St., and Court St. from F to E St.

Yuba City, Calif.—The Board of Supervisors of Sutter County is considering the construction of a highway from Yuba City to Nicolaus. The estimated cost is $120,000.

INDUSTRIAL WORKS

✚Boston, Mass.—The contract for the erection of the building for the Hunt Spiller Mfg. Corporation, 383 Dorchester St., has been awarded to the C. A. DODGE CO., Erie St., Cambridge, Mass.

✚Boston, Mass.—The general contract for the erection of the two-story, 32x42-ft. storage building for Edward F. Holbrook, 63 East 83d St., New York, has been awarded to FRANK H. POWER, 75 Chestnut St., Boston, Mass.

✚Fall River, Mass.—The general contract for the erection of the four-story and basement warehouse for Brewer & Co., Worcester, Mass., has been awarded to JOHN CROWE CO., Fall River, Mass.

✚Holyoke, Mass.—The Eureka Ruling & Binding Co. has awarded contract for constructing a three-story and basement brick factory to J. J. O'NEILL, Holyoke, Mass., at $20,800. Noted Sept. 10.

✚Holyoke, Mass.—The general contract for the erection of the dye house and power house for the Germania Mills, has been awarded to the CASPER RANGER CONSTRUCTION CO., Springfield, Mass. Noted July 2.

Peabody, Mass.—Marrs Bros. will erect a four-story, 45x100-ft. factory at Peabody, for the manufacture of leather novelties.

✚Albany, N. Y.—Contracts for the erection of the six-story 85x200-ft. warehouse at Broadway, Orange and Montgomery Sts., have been awarded as follows: General contract, WILLIAM CROW CONSTRUCTION CO., 103 Park Ave., New York; plumbing, JAMES WALSH SONS, Albany; electric work, MORTON HAVENS, JR., Albany.

Gloversville, N. Y.—The plant of E. S. Parkhurst & Co., manufacturer of textiles, which was recently damaged by fire will be rebuilt at once.

Peekskill, N. Y.—The Fleischmann Co. will erect a laboratory and storage building at Peekskill. M. Cetendorf is Mgr., 701 Washington St., New York.

✚Camden, N. J.—The contract for constructing the building for the Victor Talking Machine Co., has been awarded to CRAMP & CO., Philadelphia, Penn. Estimated cost, $300,000. Noted Sept. 3.

Cape May, N. J.—Plans have been completed by Lloyd Titus, Arch., Cape May, for a cold storage building to be erected at Cape May, for the Neptune Fisheries Co. It will be one story, 153x71 ft. and 153x68 ft. Estimated to cost $100,000.

Paterson, N. J.—The East Jersey Lock Bar Pipe Co. contemplates rebuilding its plant at Paterson. The estimated cost is $100,000.

Chester, Penn.—Plans are being prepared by Peuckert & Wunder, Archs., 310 Chestnut St., Philadelphia, for the erection of a one-story brick, steel and concrete warehouse at Chester.

✚Harrisburg, Penn.—The Contract for the Emerson Brantingham building Co. has been awarded to ENGLISH BROS., Champaign, Ill., at $90,000.

Philadelphia, Penn.—The Barrett Mfg. Co., Philadelphia, Penn., will erect a one-story, 100x112-ft. addition to its plant at 35th St. and Grays Ferry Road.

✚The contract for the erection of the four-story warehouse at 131 North Water St. has been awarded to JAMES McCREA & BRO., 1313 Arch St., Philadelphia, Penn., at $20,000.

Pottsville, Penn.—Bids will be received until Oct. 8, by W. D. Hill, Arch., Pottsville, for a three-story, 40x80-ft. shoe factory, to be erected at Pottsville.

York, Penn.—Plans are being prepared by John B. Hamme, Arch., Wiest Bldg., for a factory to be erected for the Eisenlohr Cigar Co. Estimated cost, $15,000.

✚Huntington, W. Va.—The general contract for the construction of the three-story and basement warehouse, 41x90 ft., on Fourth St., for the Banks Supply Co., has been awarded to JOHN B. LALANCE, 1244 Third Ave.; structural steel, to RIVERSIDE BRIDGE WORKS, Martins Ferry, Ohio. Noted June 25.

Atlanta, Ga.—The Exposition Cotton Mills has had plans prepared for the construction of a 93x100-ft. warehouse.

✚St. Augustine, Fla.—The contract for the erection of the laundry at the Deaf, Dumb and Blind Institute has been awarded to ARTHUR E. ITTNER, Albany, Ga., at $10,889.

Carson, La.—The Central Coal & Coke Co. will rebuild the saw mill recently destroyed by fire, at Carson.

✚Memphis, Tenn.—The Southern R.R. Co. has awarded the contract for the erection of the roundhouse at its Forrest Yards, to the CONSOLIDATED ENGINEERING CO., Baltimore, Md. The estimated cost is $60,000.

Marysville, Ky.—Bert Baldwin & Co. Archs., Cincinnati, Ohio, are preparing plans for the erection of a three-story, 32x114-ft. laundry plant, and a 72x41-ft. power house for Rohen & Martin, Marysville, Ky.

Bellaire, Ohio—The American Stamping & Enameling Co. plans to construct a $200,000 addition to its plant at Bellaire.

Canal Dover, Ohio—The Auto Products Co. will build a plant in Canal Dover, for the manufacture of automobile parts and accessories. H. B. Redding, Cleveland, Ohio, is Mgr.

Cincinnati, Ohio—The M. A. Hunt Co. plans to construct a three-story factory, 40x100 ft. Estimated cost, $30,000. Anthony Kunz, Jr., 955 West Court St., Cincinnati, is Arch.

Cleveland, Ohio—The Pilsener Brewing Co., Cleveland, is having plans prepared for a warehouse to be constructed at Clark Ave. and West 65th St. It will be three stories, 110x200 ft., of brick.

The West Steel Casting Co. is receiving bids for a one-story factory addition, 93x51 ft. Frederick Baird, Bangor Bldg., Cleveland, is Arch.

The M. & M. Co., Cleveland, will erect a plant on additional property recently acquired for the purpose. J. C. McLean is Gen. Mgr. of the company.

✚Niles, Ohio—The Ohio Galvanizing & Mfg. Co., Niles, Ohio, has awarded the contract to the HUNTER CONSTRUCTION CO., Dollar Bank Bldg., Youngstown, Ohio, for constructing a one-story factory, 100x100 ft., and 120x200 ft. The Osborn Engineering Co., Engineers' Bldg., Cleveland, is Engr.

✚Tiffin, Ohio—The Great Western Pottery Co., Tiffin, has awarded the contract to A. BENTLEY & SON, Toledo, Ohio, for constructing its proposed factory, at about $45,000.

Wooster, Ohio—The Malworm Aluminum Co., Wooster, plans the construction of a 200x200-ft. addition to its plant.

Detroit, Mich.—The Detroit Steel Products Co. plans to construct an addition to its spring factory. It will be one-story, 84x72 ft. Smith, Hinchman & Grylls, Washington Arcade, Detroit, are Archs.

The Fisher Body Co., Detroit, will build a factory addition to its main plant at Harper Ave. and Hastings St. The new structure will be 29x157 ft., two stories. It will cost approximately $10,000.

Chicago, Ill.—Bids are being received by Postle & Fisher, Archs., 140 South Dearborn St., Chicago, for the construction of a factory for the Albert A. Arnold Paper Co., 16 South Peoria St. It will be four stories and basement, 149x127 ft. Noted Sept. 17.

The Pettibone Mulliken Co., Chicago, is receiving bids for the construction of a foundry and pattern shop. The foundry will be 300x500 ft., an dthe pattern shop 100x200 ft. 200 ft.

Rockton, Ill.—The Great Northern Manufacturers, Rockton, plan to construct a 75x150-ft., two-story factory.

Dousman, Wis.—The Eagle Lime Products Co., Dousman, is considering the construction of a factory. Estimated cost, $10,000.

Milwaukee, Wis.—Herbst & Hufschmidt, Archs., Milwaukee, are preparing plans for a two-story laundry. Estimated cost, $20,000.

The Evinrude Motor Co., Milwaukee, plans to add a story to its factory. Estimated cost, $14,000.

Des Moines, Iowa—The Green Foundry & Furnace Works, Des Moines, has had plans prepared for a plant to be erected on a four-acre site in East Des Moines. The buildings to be erected are: Two-story, 66x200-ft. main building; one-story, 90x265-ft. foundry and machine shop; two-story, 40x120-ft. warehouse. Noted July 23.

St. Paul, Minn.—O. H. Round, Arch., Oppenheim Bldg., St. Paul, is preparing plans for the construction of a one-story and basement factory. Estimated cost, $15,000.

St. Peter, Minn.—The construction of a factory at St. Peter for the manufacture of incubators is under consideration. H. A. Nourse, St. Paul, Minn., is interested.

Ludlow, S. D.—The Equity Creamery Association plans to construct a creamery at Ludlow to cost $50,000.

Kansas City, Mo.—The R. & R. Investment Co. plans to construct a two-story and basement factory, 104x110 ft. S. E. Edwards, Sheidley Bldg., Kansas City, is Arch.

The Kansas City Terminal Ry. Co., Kansas City, has obtained a permit, and will erect a two-story brick addition to its roundhouse at 26th St. and Southwest Blvd., to cost $35,000.

Tacoma, Wash.—The Carstens Packing Co., Tacoma, plans to rebuild its factory, recently destroyed by fire at a loss of $600,000.

Portland, Ore.—George M. Harris, of Terry & Harris, Portland, Ore., is considering the construction of a cast-iron pipe foundry at Portland. The estimated cost is $250,000.

Lordsburg, Calif.—The La Verne Orange Growers' Association has decided to build a precooling plant at Lordsburg, to cost about $50,000.

San Francisco, Calif.—It is reported that the F. S. Moody Estate will construct a two-story building, 72x125 ft., on Bluxome St., San Francisco, Calif., to be occupied by the National Biscuit Co. The estimated cost is $25,000.

✚Windsor, Ont.—J. T. Wing & Co., Windsor, have awarded the contract to LEO WEISS Detroit, Mich., for constructing a four-story and basement warehouse, 100x100 ft. James Pennington, La Bell Bldg., Windsor, is Arch. Noted July 23.

New Westminster, B. C.—The Brackman-Ker Milling Co. is considering rebuilding its factory at New Westminster, recently destroyed by fire at a loss of $20,000.

FEDERAL GOVERNMENT WORK

Concrete Coal Pocket—Fort Williams (Cape Cottage post office) Maine—(Official)—The following are the bids received by C. O. Zollars, Constructing Quartermaster, for constructing a concrete coal pocket at Fort Williams: Forgions & Romano, Portland, Maine, $8674; Sanders Construction Co., Portland, $8255; Mahoney Bros., Boston, Mass., $10,600; Small & Ingalls, Bar Harbor, Maine, $91,970; Marshall Bros., Portland, $3737.

Headstones—Boston, Mass.—Bids will be received until Oct. 9, by Lieut. Col. W. S. Wood, Depot Quartermaster, 263 Summer St., Boston for furnishing 12,600 white marble headstones.

Shipbuilding Cranes — Boston, Mass. — Bids will be received by H. R. Stanford, Chief, Bureau of Yards and docks, Navy Dept., Washington, D. C., until 11 a.m., Oct. 3, for constructing shipbuilding cranes at the U. S. Navy Yards, Boston, and Philadelphia, Penn.

Post Office—Danbury, Conn.,—(Official)—Bids will be received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p.m., Nov. 4, for constructing a two-story and basement brick post office at Danbury.

Post Office—Stamford, Conn.,—(Official)—Bids will be received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p.m., Nov. 4, for constructing a post office at Stamford. The building will be one-story and basement of stone brick, terra cotta and marble.

Repairs To Steamer—Fort Slocum, N. Y.—Bids will be received until Sept. 30 by the Quartermaster, U. S. Army for making repairs to the U. S. steamer, "General D. S. Stanley."

Sheet Metal Work—New York, N. Y.—(Official)—Bids will be received until 3 p.m., Oct. 2, by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for replacing of old c.-i. roof trim with sheet metal on the U. S. Court House and Post Office, New York. Plans may be obtained from the Chief Engineer and Superintendent, U. S. Public Buildings, Room 727 Custom House Bldg., New York.

Piers, Ferry Rack, Bridge, Etc.—New York N. Y.—(Official)—Bids will be received by Oscar Wenderoth, Superv. Arch., Washington, D. C., until 3 p.m., Oct. 14, for constructing new dock piers, ferry rack, bridge, etc., at the U. S. barge office, New York. Plans may be obtained at the Office of the Chief Engineer and Superintendent, etc., United States Public Buildings, Room 727, Custom House Bldg., New York, N. Y., or at the office, of the Supervising Arch.

Lighting Fixtures, Etc.—New York, N. Y.—(Official)—Bids will be received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p.m., Sept. 29, for installing new lighting fixtures and making repairs to the old fixtures in the United States Court House and Post Office.

Acetylene Buoy Bodies—New York, N. Y.—(Borough of Richmond)—(Official)—Bids will be received by the Light House Inspector, Tompkinsville, until 2 p.m., Sept. 28, for furnishing and delivering to light house depot, Tompkinsville, the acetylene buoy bodies, type S.

Post Office—Carnegie, Penn.—(Official)—Bids will be received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p.m., Oct. 27, for constructing a post office at Carnegie. The building will be one-story and basement of brick.

Shipbuilding Cranes—Philadelphia, Penn.—See item under Boston, Mass.

Lock Gates, Etc.—Pittsburgh, Penn.—The date for receiving bids for steel lock gates, etc., at Lock No. 4, Monongahela River, has been extended from Oct. 3 to Oct. 15. Noted Sept. 10.

✚Curbing—Washington, D. C.—The contract for furnishing curbing during the year 1915 in the District of Columbia has been awarded to the NORTH CAROLINA GRANITE CORPORATION, Mount Airy, N. C., as follows: Straight curbing, 79c. per lin.ft.; circular curbing, $1.05 per lin.ft.

✚Paving Pitch—Washington, D. C.—The contract for furnishing paving pitch for use in the District of Columbia during the year 1915 has been awarded to BARRETT MFG. CO., Philadelphia, Penn., at $18 per ton.

✚Fuel Oil—Washington, D. C.—The contract for furnishing fuel oil for use in the District of Columbia during the year has been awarded to the STANDARD OIL CO., Baltimore, Md., at 3.45c. per gal.

Bricks—Washington, D. C.—Bids will be received by Samuel McGowan, Paymaster Gen., Bureau of Supplies, Washington, D. C., until Oct. 6, for furnishing 132,000 dark-red hard-burned bricks f.o.b. Washington.

✚Sewer Brick—Washington, D. C.—The contract for furnishing 200,000 red sewer brick for use in the District of Columbia has been awarded to the FREDERICK BRICK WORKS, Frederick, Md., at $10 per M.

✚Limestone Dust—Washington, D. C.—The contract for furnishing limestone dust for use in the District of Columbia during the year 1915 has been awarded to the STANDARD LIME & STONE CO., Baltimore, Md., at $2.20 per ton.

✚Paving Blocks and Sewer Bricks—Washington, D. C.—The contract for furnishing paving blocks for use in the District of Columbia during the year 1915 has been awarded to the BALTIMORE CLAY PRODUCT CO., Baltimore, Md., at $22.50 per M.; sewer bricks to the MORGANTOWN BRICK CO., Morgantown, W. Va., at $15.95 per M.

✚Asphalt Cement—Washington, D. C.—The contract for furnishing asphalt cement for use in the District of Columbia during the year 1915 has been awarded to the SUN CO., Philadelphia, Penn., at $15.50 per ton.

✚Cement—Washington, D. C.—The contract for furnishing portland cement for use in the District of Columbia during the year 1915 has been awarded to the SECURITY CEMENT & LIME CO., Hagerstown, Md., at $1.04 per bbl.

Sewers—Washington, D. C.—(Official)—Bids will be received by the Commissioners of the District, until 2 p.m., Sept. 28, for constructing about 6235 lin.ft. of brick and concrete trunk sewers. Oliver P. Newman, Frederick L. Siddons and Chester Harding are Comrs.

Floating Cranes—Norfolk, Va.—Bids will be received by H. R. Stanford, Chief of the Bureau of Yards and Docks, Navy Dept., Washington, D. C., until 11 a.m., Jan. 16, 1915, for a 150-ton capacity floating revolving crane for the navy yard, Norfolk.

Trestles, Etc.—Wheeling, W. Va.,—Bids will be received by Maj. J. P. Jervey, Engineers Office, Wheeling, until Oct. 15, for furnishing and delivering Poiree trestles, recess and engine-pit covers for dam No. 15, Ohio River.

Boilers and Stack—Port Royal, S. C.—(Official)—The date for receiving bids for installing two 50-hp. boilers with steel stack at the pumping station, Naval Disciplinary Barracks, Port Royal, has been extended from Oct. 3 to 11 a.m. Oct. 17. H. R. Stanford is Ch., Bureau of Yards and Docks, Washington, D. C. Noted Sept. 17.

✚Cement—Montgomery, Ala.—The contract for furnishing about 20,000 bbl. of American portland cement, to be delivered at Riverside, Ala., has been awarded to the CAROLINA PORTLAND CEMENT CO., Montgomery, Ala., at $29,800. Noted Sept. 10.

✚Post Office—Tupelo, Miss.—The contract for constructing the post office at Tupelo has been awarded to W. H. FISSELL & CO., 1133 Broadway, New York, N. Y. Noted July 23 and Sept. 2.

✚Post Office—Cookeville, Tenn.—The contract for constructing the post office at Cookeville has been awarded to W. H. FISSELL & CO., 1133 Broadway, New York, N. Y. Noted June 25 and Aug. 6.

✚Post Office—Pulaski Tenn.—The contract for constructing the post office at Pulaski has been awarded to ALGERNON BLAIR, Montgomery, Ala. Noted June 4.

✚Post Office—Fulton, Ky.—The contract for constructing the post office has been awarded to J. S. ROGERS, Moorestown, N. J. Noted July 30 and Sept. 10.

★Steel Reinforcement — Ashtabula, Ohio — (Official) — The following are the bids received Sept. 10, by Roscoe House, Lighthouse Inspector, Buffalo, N. Y., for the steel reinforcement for the base of the Ashtabula West Breakwater Pierhead Light Station, August Feine & Sons Co., Buffalo, N. Y., $3175; Weatherly Iron & Steel Co., Weatherly, Penn., $2830; Buffalo Structural Steel Co., Buffalo, N. Y., $4159; Van Dorn Iron Works, Cleveland, $3849; McKinnon Iron Works, Co., Ashtabula, Ohio, $2579; Phœnix Foundry & Machine Co., Ashtabula, Ohio, $2495; Variety Iron & Steel Works, Co., Cleveland, Ohio, $2950. Noted Aug. 27.

✚Elevator—Columbus, Ohio—The contract for the installation of an electric freight elevator and making miscellaneous changes, etc., in the U. S. post office and court house at Columbus, has been awarded to the OTIS ELEVATOR CO., Washington, D. C., at $8390. Noted Sept. 10.

Post Office—Collinsville, Ill.—(Official)—Bids will be received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p.m., Nov. 6, for constructing a two-story and basement fireproof post office at Collinsville.

Post Office—Princeton, Ill.—(Official)—Bids will be received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p.m., Nov. 5, for constructing a two-story and basement fireproof post office at Princeton.

Building Addition—Milwaukee, Wis.—The following are the bids received by Oscar Wenderoth, Superv. Arch., Washington, D. C., for (a) adding a third story, with reinforced

concrete fourth floor, and roof, etc., (b) adding a third story, with a steel-framed fourth floor supporting a wood-framed room and a metal furred and plastered third story ceiling to the Appraiser's stores at Milwaukee. F. W. Taddey & Son, Milwaukee (a) $13,400; (b) $11,800; General Construction Co., Milwaukee (a) $15,713; (b) $14,332; Northern Construction Co., Milwaukee, (a) $17,703; (b) $15,988; American Construction Co., Milwaukee (a) $24,400; (b) $23,480.

✚**Post Office**—Arkansas City, Kan.—The contract for constructing the U. S. post office at Arkansas City, has been awarded to the GENERAL CONSTRUCTION CO., Milwaukee, Wis., at $51,632.

Canal Work—Dodson, Mont.—(Official)—Bids will be received until 2 p.m., Oct. 28, by F. H. Newell, Dir., U. S. Reclamation Service, Malta, Mont., for the reconstruction of Dodson South Canal at Dodson Bridge, in connection with the Milk River Irrigation Project. The work involves about 71,000 cu.yd. of excavation, 12,000 cu.yd. of puddled filling, 5200 cu.yd. of riprap, 40 cu.yd. of concrete and the moving of two steel bridge spans, abutments and pier. The work is situated on the south side of Milk River, about 1¼ miles south of Dodson.

★✚**Excavation, Etc.**—Glendale, Ariz.—(Official)—The contract for constructing the Cave Creek cutoff of the Arizona Canal, Salt River Project, Ariz., and the necessary laterals, involving in all about 131,000 cu.yd. of excavation has been awarded to MARTIN & GILLIS, Phœnix, Ariz., at $15,649. The contract for constructing about 300 cu.yd. of reinforced concrete and about 107 sq.yd. of grouted pavement in connection with this work has been awarded to MANLY BROS. & CO., Oklahoma City, Okla., at $2956. The work is located near Glendale. Noted July 16.

✚**Canal**—Phoenix, Ariz.—(Official)—The contract for constructing the earthwork and structures in connection with the Wallace Feeder Canal, Salt River Project, Ariz., has been awarder to S. J. RHODES, Phoenix, at $14,152.

Timber Wharf, Wharf Shed—Bremerton, Wash.—(Official)—The date for receiving bids for the construction of the timber wharf and wharf shed at the Naval Torpedo Station, Puget Sound, Wash., has been extended from 11 a.m., Sept. 26, to 11 a.m., Oct. 10. Noted Aug. 27.

✚**Machinery and Valves**—Seattle, Wash.—(Official)—The contract for furnishing machinery and valves for the Lake Washington Canal Locks has been awarded to HANS PEDERSON, Seattle, at $108,000. Other bids were, McMyler Interstate Co., $106,036; William E. Chase Engineering Co., $122,321; J. & J. B. Mulholland Co., $114,525; C. C. Moore & Co., $119,620; Camden Iron Works, $163,762; A. McLean, $130,147; Seattle Construction & Drydock Co., $117,160. Noted July 2 and July 16.

Metal Vault Eulpment—San Francisco, Calif.—(Official)—Bids will be received until 3 p.m., Oct. 7, by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for installing metal vault equipment at the U. S. subtreasury, San Francisco.

Miscellaneous Supplies—Panama—(Official)—Bids will be received by Maj. F. C. Boggs, Gen. Pur. Officer of the Panama Canal, Washington, D. C., until 10:30 a.m., Sept. 30, for furnishing steel, wire cable, files, drill sleeves, stocks and dies, taps, twist drills, hoes, metallic tapes, manila rope, rubber packing, cotton sheeting, cotton canvas, coal tar, linseed oil, Japan drier, orange shellac, varnish, burnt umber and acetone. These supplies are to be delivered f.o.b. dock at either Colon, Atlantic Port, or Port of Anacon, Balboa, Canal Zone, Pacific Port.

MISCELLLANEOUS

Dredging and Bulkhead—Boston, Mass.—The Harbor and Land Commissioners have received the following bids for constructing a bulkhead on the east side of Saugus River, in Lynn: George T. Rendle, $19,975; W. S. Rendle, $16,243; H. P. Converse & Co., $26,660; W. H. Ellis & Sons Co., $17,443; Lawlor Bros., $20,824; Thomas E. Ruggles, $20,718. For dredging, the bids were as follows, per cu.yd.: (Item 2) placing dredged material behind bulkhead, (Item 2) taking dredged material out to sea, (Item 3) removing boulders—John R. Burke, Boston, (1) 44⅜c., (2) 40⅛c., (3) $10; John H. Gerrish, Boston, (1) 32c., (2) 23½c., (3) $7.50; Eastern Dredging Co., Boston, (1) 31⅛c., (2) 24⅜c., (3) $10; Atlantic Gulf & Pacific Co., New York, (1) 32⅞c., (2) 23c., (3) $10; Bay State Dredging Co., Boston, (1) 34½c., (2) 25½c., (3) $10; Eugene Braymann, Boston, (1) no bid, (2) 19½c., (3) 19½c.

✚**Dredging**—Boston, Mass.—The contract for dredging at Hadley on the Connecticut River has been awarded, by the State Harbor and Land Commission, to DENNIS F. CROWLEY, 658 Adams St., Molton, at $2.80 per cu.yd. The other bidder was Kieley & Gleason, Northampton, at $3.18 per cu.yd.

Sea Wall—Hampton, Mass.—Plans have been prepared for the extension of the Hampton sea wall, a section of which is to be built each year until it reaches from Whites Island to Boars Head.

✚**Retaining Wall, Dredging, Etc.**—Lawrence, Mass.—Bids for widening Merrimac St., along the Shawsheen River, building a retaining wall and for dredging the channel were as follows: MERRIMAC CONSTRUCTION CO., Lawrence, $15,630 (awarded contract); W. M. Tike, Lawrence, $16,975; T. Stuart & Son Co., Newton, $17,076; William H. Callahan, Lawrence, $19,590; J. W. Buswell, Salisbury, $20,305; John Cashman & Sons Co., Boston, $21,495; M. L. Mahoney Estate, Lawrence, $23,485; Timothy A. Moynihan, South Hamilton, $25,992. Noted Sept. 3.

★**Bridge**—Central Falls, R. I.—(Official)—Bids will be received jointly by the city of Central Falls and the town of Cumberland, until Oct. 10, for the construction of a reinforced-concrete bridge across the Blackstone River. Howard F. Esten, 18 East Ave., Pawtucket, is Consult. Engr. For details see advertisement under "Contracts to Be Let."

★**Subway**—New York, N. Y.—(Official)—Bids will be received by the Public Service Commission, 154 Nassau St., until Oct. 9, for constructing Section No. 1, Route 48, a part of the Seventh Ave.-Lexington Ave. rapid transit system. For details see advertisement under "Contracts to Be Let."

★**Creek Improvement**—Syracuse, N. Y.—(Official)—Bid will be received at the office of the Syracuse Intercepting Sewer Board until 4 p.m., Oct. 7, for the improvement o Onondaga Creek in Syracuse. For details see advertisemen under "Contracts to Be Let."

★**Bridge Work**—Camden, N. J.—(Official)—Bids will be re ceived by the Bridge Committee until 10 a.m., Oct. 14, fo additional material in position at the new Broadway Bridge over Newton Creek, between Gloucester and Camden. Fred W. Gercke is Chn. Bridge Com. For details see advertisement under "Contracts to Be Let."

Elimination of Grade Crossing—Trenton, N. J.—The Philadelphia & Reading R.R. is making surveys preparatory to elevating the tracks of the Trenton Junction branch, for the elimination of several grade crossings.

Comfort Station—Scranton, Penn.—The contract for constructing the proposed comfort station on Court Sq. will be awarded soon by the city and county authorities. Estimated cost, $25,000. J. W. Duckworth, Scranton, is Arch.

✚**Wall**—Charleston, W. Va.—The city has awarded the contract to BOARD & REED, Charleston, for constructing a retaining wall around the city levee from a point opposite Summers St. to the Union Bldg., at the foot of Capitol St., at $21,624. Other bidders were: McHale & Cain, Elkins, $21,818; D. Minotti, Charleston, $22,715; Louisa Contracting Co., Louisa, Ky., $23,858; Virginia Concrete Co., Richmond, Va., $24,954; Hatfield Construction Co., $26,621; M. G. Watson, Huntington, W. Va., $36,532.

Drainage—Salisbury, N. C.—The Drainage Commissioners plan to drain Withrows and Second Creeks. The estimated cost is $75,000. C. M. Miller is the Engr. and Supt.

✚Grants Creek Drainage District has awarded the contract to MARK P. MOORE, China Grove, N. C., for draining 1859 acres of land and for the construction of a 14-mile canal. Estimated cost, $35,000.

Bids will be received until Oct 3, by the Commissioners of Kerr and Sills Creeks District, Rowan County, for draining and removing 339,178 yd. material from Kerr and Sills Creeks. The estimated cost is $25,500. Plans and specifications, Clerk's office, Salisbury. C. M. Miller, Engr. and Supt.

Docks—Miami, Fla.—The city has commissioned Isham Randolph, Engr., Chicago, Ill., to prepare plans for municipal docks. Three sets of tentative plans have been submitted, each calling for 1000-ft. docks, including railroad trackage and accommodations for from four to eight boats. J. W. Watson is Mayor.

Docks—Mobile, Ala.—The city contemplates securing additional waterfront property and plans to build docks and warehouses at an estimated cost of $500,000. Patrick J. Lyons is Mayor.

Drainage—Gretna, La.—The Fourth Jefferson Drainage District will vote, Sept. 29, on $24,000 bond issue for the construction of a drainage system in Subdrainage District No. 2. A. H. Ahten is the Pres.

Drainage—Gueydan, La.—The Town Council has called for bids for the construction of a drainage and navigable canal, also for cleaning and deepening the drainage canal to Grand Lake. The estimated cost is $15,000.

Interlocking Plant—Chattanooga, Tenn.—The Queen & Crescent Route has authorized the expenditure of $80,000 for extension work on the Belt Ry., Chattanooga. The work will include extension of interlocking plant at East End Ave., and the installation of automatic signals on the double-track line. H. Baker, Cincinnati, Ohio, is the Gen. Mgr.

Drainage—Jackson, Tenn.—Bids will be received, until Oct. 1, by Drainage District No. 3, Madison County, A. W. Stovall, Chmn., for clearing right-of-way, 200 ft. wide, construction of a drainage canal 14.95 miles long, and construction of five laterals 100 ft. wide. A total earth removal of 842,854 cu.yd.

Tunnels—Jellico, Tenn.—The Jellico Coal & R.R. Co. plans to construct two tunnels, one 300 ft. long, the other 2000 ft. long. D. C. Barker is Ch. Engr.

Dredging—Celina, Ohio—The Commissioners of Auglaize, Mercer, Darke and Shelby Counties will let the contract Oct. 6 for the improvement of 14 miles of Mile Creek. The estimated cost is $29,000.

Ditch—Princeton, Ind.—Bids will be received until Sept. 20, by Louis Meyer, Comr. of Const., at the office of the County Clerk, for the construction of a main ditch and two laterals.

Ditch—Albert Lea, Minn.—The date for receiving bids for the construction of Town Ditch No. 1 has been postponed until Oct. 16. Noted Aug. 27.

Drainage—(Official)—Texarkana, Ark.—The Nix Creek Drainage District will receive bids until 11 a.m., Oct. 10, for the construction of a drainage canal and laterals. C. D. Christian, State National Bank Bldg., Texarkana, is the Eng.

Levee—Eagle Lake, Tex.—J. C. Nagle and G. R. Abney, Engrs., Eagle Lake, have completed plans for levee work along the Colorado River, estimated to cost $67,000. Noted Aug. 13.

Recreation Pier—Galveston, Tex.—Arthur Duchamp, Engr., Hotel Galvez, has prepared plans for a 1100-ft. recreation pier, which will provide for various amusement enterprises. The estimated cost is $100,000.

Dredging—Houston, Tex.—The city has appropriated $12,000 to dredge Buffalo bayou from San Jacinto St. to the Turning Basin. E. E. Sands is the City Engr.

Wharf—Houston, Tex.—Plans of the Harbor Board for the construction of the 1000-ft. wharf on the Houston Ship Channel, have been approved by Consulting Engineer J. F. Coleman, New Orleans, La. Noted July 9, Aug. 13.

✚**Filling**—Aberdeen, Wash.—The contract has been awarded to LEWIS & CO., Portland, Ore., for filling, requiring 480,000 cu.yd., at the western tidelands. Estimated cost, $175,000. The company has started work.

✚**Dock**—Astoria, Wash.—The contract for the construction of the first unit of the dock program of the Port of Astoria has been awarded to C. L. HOUSTON, Astoria, at $145,425. In addition to a 90x430-ft. dock, the contract calls for a two-story warehouse.

Cut-Off—Tacoma, Wash.—The Inter-County River Improvement Commission has rejected bids for the third time for the construction of the Murphy Cut-Off. Informal proposals will be received. The estimated cost is $200,000. W. J. Roberts is Ch. Engr. Noted Sept. 3.

Dock—Portland, Ore.—Local press reports state that the Southern Pacific Co. is planning to build a dock between the Burnside bridge and the Oregon & California dock. The estimated cost is said to be $75,000.

Automobile Plates, Chauffeurs' Badges, Etc.—Sacramento, Calif.—Low bids were received by the State Motor Vehicle Department as follows: (automobile plates), Ingram-Richardson Mfg. Co., Beaver Falls, Penn., at $50,899; (chauffeurs' badges), Greenduck Co., Chicago, Ill., at $503; (motor vehicle seals), L. A. Rubber Co., Los Angeles, at $2425.

Tunnel—San Francisco, Calif.—The Board of Public Works has extended the time for receiving bids for the construction of the Twin Peaks tunnel, to Sept. 30. Noted May 21, June 18, July 9.

Drydocks—North Vancouver, B. C.—The Amalgamated Engineering Co. has secured a subsidy from the Canadian government and will construct a 100x1150-ft. drydock, which will be divided into two compartments of 500 and 650 ft. each. The estimated cost is $6,500,000.

BUILDINGS

Manchester, N. H.—Plans are being revised for the three-story and basement hospital to be erected at Mammoth Road. Wilfred E. Provost, 581 Union St., Manchester, is the Arch. Noted July 30.

+Adams, Mass.—The contract for the erection of the armory at Adams has been awarded to JEREMIAH P. KEATING, East Main St. The estimated cost is $60,000.

Arlington, Mass.—The lowest bid received for the erection of the high school at Arlington, was submitted by the Light, Heat & Power Co., 77 Franklin St., Boston, Mass., at $156,530 Noted Sept. 10.

Brockton, Mass.—The lowest bid received for the construction of the three-story and basement high school, 188x144 ft., was submitted by C. A. Batson, 37 West Elm St. The estimated cost is $300,000.

Framingham, Mass.—Bids will be reecived until Sept. 26 by the State Board of Education, for the erection of a dormitory and refectory. David Snedden, 15 Ashburton Place, Boston, is Comr

+Lawrence, Mass.—The contract for the erection of the four-story office building for the Jos. Shattuck estate, has been awarded to the E. N. PITMAN CO., Bay State Bldg. James E. Allen, 283 Essex St., is the Arch.

+Lawrence, Mass.—Contracts for the erection of the three-story and basement school have been awarded to: (General contract) E. A. PEABODY & CO., Bay State Bldg.; (steam heating and ventilating) LAWRENCE PLUMBING & HEATING CO., 121 Newbury St.

+Springfield, Mass.—The contract for the erection of the hotel for Mrs. G. A. Rainville has been awarded to M. L. ANGERS, 327 Main St., Springfield, at $50,000.

Waltham, Mass.—Bids will be received until 10 a.m., Sept. 29, by the Public Library Commissioner, for the library to be erected at Waltham. Loring & Leland are the Archs., 7 Water St., Boston, Mass.

Pawtucket, R. I.—The lowest bidder for the 16-room school to be erected on Abbott St. was the Frank G. Rowley Co., Pawtucket, at $87,538. Noted July 23.

+Greenwich, Conn.—The general contract for constructing the school at Hamilton and Griggs Ave. has been awarded to HENRY SENFT, East Portchester, N. Y., at $44,505.

+Glens Falls, N. Y.—The general contract for the erection of the two-story and basement school has been awarded to the A. M. BARROWS CONSTRUCTION CO., 345 Fifth Ave., New York, at $44,099.

+Contracts for the erection of the bank building for the First National Bank have been awarded to: (General contract) ANDREW J. ROBINSON CO., 123 East 23d St., New York, (plastering) DAVIS BROWN, 306 East 40th St., New York.

New York, N. Y.—(Borough of Manhattan)—Plans have been completed by Severance & Van Allen, Archs., for a three-story building to be erected at 50 Broadway, for the Standard Oil Co. The estimated cost is $225,000.

Plans have been completed by Mulliken & Moeller, Archs., for two apartment houses to be erected at 310 West 86th St., for the Eighty-sixth St. and West End Ave. Co. The estimated cost is $800,000.

+The contract for the erection of the six-story clubhouse at 62d St. and Park Ave., for the Colony Club, has been awarded to NORCROSS BROS CO., 103 Park Ave., New York. Noted Sept. 3.

+The general contract for the erection of the store and office building at Madison Ave. and 58th St., for Paul M. Herzog, has been awarded to J. T. BRADY & CO., 103 Park Ave. The estimated cost is $150,000.

+Olean, N. Y.—Contracts for the erection of the seven-story, 45x100-ft. bank and office building for the First National Bank at State and Union Sts., have been awarded as follows: General contract, GEORGE A. FULLER CO., 111 Broadway, New York; electric work, ELECTRIC CONSTRUCTION & SUPPLY CO., 39 Cortland St., New York.

+Rochester, N. Y.—The contract for constructing the brick school for the Board of Education, has been awarded to the R. T. FORD CO., at $141,000.

East Orange, N. J.—Plans have been completed by the Board of Trustees, of East Orange Public Library, for the additions and alterations to the library. The estimated cost is $40,000.

+Englewood, N. J.—Contracts for the erection of the two-story hospital at Englewood, have been awarded as follows: General contract, WILLIAM H. WHYTE, 382 Railroad Ave., Hackensack, N. J.; brick, structural steel, J. K. COOK & SONS, Athenia, N. J., reinforced concrete floors, arches, WHITE FIREPROOFING CONSTRUCTION CO., 286 Fifth Ave., New York.

Plainfield, N. J.—Bids will be received until 8 p.m., Sept. 28, by Wilder & White, Archs., 50 Church St., Manhattan, for the erection of a brick school on Evergreen Ave. The estimated cost is $125,000. Noted Sept. 17.

Trenton, N. J.—Plans are being prepared by W. A. Poland, Arch., Administration Bldg., for the erection of a two-story and basement high school. The estimated cost is $150,000.

Greensburg, Penn.—E. E. Bailey & Co., Archs., Oil City, Penn., are preparing plans for a one-story bank building, 25x100 ft., for the Westmoreland National Bank, Greensburg. Estimated cost, $50,000.

Washington, D. C.—Bids will be received until Nov. 1, by Snowden Ashford, Municipal Arch., Washington, for the high school to be erected at Washington. The estimated cost is $450,000. Noted Sept. 17.

+Huntington, W. Va.—The contract for the erection of the school at Huntington has been awarded to the KING LUMBER CO., Charlottesville, Va. Verus T. Ritter is the Arch., Huntington. Noted May 14.

+Morgantown, W. Va.—The contract for the erection of the high school at Morgantown has been awarded to R. B. KITCHEN CO., Wheeling, W. Va., at $111,085.

+Parkersburg, W. Va.—Contracts for the erection of the one-story bank building for the Parkersburg National Bank, have been awarded as follows: General contract, H. H. VOUGHT & CO., 346 Madison Ave., New York; reinforced concrete, CITIZENS' CONCRETE CO., Avery St.; electric work, CITIZENS' ELECTRIC CO., 626 Julian St.

The Baltimore & Ohio R. R. Co. will construct a freight depot at Ann St. Estimated cost, $75,000.

Wheeling, W. Va.—Plans are being prepared by Edward Bates Franzheim, Arch., Schmulbach Bldg., Wheeling, Va., for remodeling the four-story bank building at Wheeling. The estimated cost is $50,000.

+Whiteville, N. C.—The contract for the erection of the county court house has been awarded to ROSE & CO., Greensboro, at $50,000.

Atlanta, Ga.—Walker & Chase, Archs., Candler Bldg., Atlanta, are preparing plans for the erection of an eight-story, 52x120-ft. office building. The estimated cost is $120,000.

+Columbus, Ga.—The contract for constructing the steel work in connection with the city hospital has been awarded to the COLUMBUS IRON WORKS CO., Columbus, Ohio.

+Savannah, Ga.—The contract for the addition to the building of the Citizens' Southern Bank has been awarded to E. MORGAN, Savannah, at $40,000. Noted Mar. 19.

Hattiesburg, Miss.—Bids for the Y. M. C. A. building, to be erected at Hattiesburg, have been rejected. New bids will be received. The estimated cost is $50,000.

Shreveport, La.—The lowest bid received for the hotel to be erected at Louisiana and Crockett St., was submitted by W. H. Werner, Shreveport, La., at $68,750. Noted Aug. 13.

+Louisville, Ky.—The contract for the erection of the 10-story office building for the Knights of Pythias, has been awarded to the FALLS CITY CONSTRUCTION CO., Realty Bldg., Louisville, Ky.

Bids will be received until 3 p.m., Oct. 1, by Samuel D. Jones, Business Dir., Bd. of Education, for a school to be erected at 42d and Herman Sts. J. Earl Henry is the Arch. and Engr.

+Louisville, Ky.—Contracts for the erection of the high school at Louisville have been awarded as follows: General contract, BAILEY & KOERNER, 511 Walker Bldg.; terrazza work, AMERICAN MOSAIC & TILE CO., 309 East Broadway; marble work, PETERS BURGHARD CO., 800 South 135th St. Noted Aug. 20.

+Contracts for the erection of the three-story and basement club house for the Y. M. H. A. have been awarded as follows: General contract, A. MARKHAM CO., 434 South Floyd St.; cut stone, PETERS BURGHARD CO., 800 South 13th St.; roofing and sheet metal work, J. F. WAGNER SONS CO., 1145 South Seventh St.

+Maysville, Ky.—Contracts for the erection of the three-story and basement, 50x88-ft. lodge building for the I. O. O. F., have been awarded as follows: General contract, McDOWELL & CASE, Maysville; structural iron, POTHOFF CONSTRUCTION CO., Front and Harriett Sts., Cincinnati, Ohio; masonry, WILLIAM D. OLIVER, 125 East Fifth St., Newport, Ky.; composition roofing and sheet metal work, RASP & SONS, Maysville, Ky.

Cleveland, Ohio—The city is considering the construction of a model municipal tenement house. Newton O. Baker is Mayor.

Bids are being received by Starrett & Van Vleck, Archs., New York, N. Y., for the commercial building to be constructed on Euclid Ave. for the Stock Co.

Columbus, Ohio—The Columbus Depot Co. plans to construct an interurban station. It will be three stories and basement. Estimated cost, $500,000. Frank A. Davis, Columbus, is Gen. Mgr.

East Cleveland, Ohio—R. H. Hinsdale, Arch., Osborn Bldg., Cleveland, is preparing plans for an apartment house to be constructed in East Cleveland. Estimated cost, $40,000.

Hudson, Ohio—All bids have been rejected by the Board of Education for constructing the proposed three-story and basement school. Estimated cost, $50,000.

Lakewood, Ohio—W. S. Lougee, Arch., Marshall Bldg., Cleveland, Ohio, is preparing plans for a residence on Lake Ave., Lakewood, for M. F. Bramley. Estimated cost, $40,000.

Norwood, Ohio—The Norwood Presbyterian Church plans to erect a one-story and basement church. Estimated cost, $50,000.

Warren, Ohio—The Western Reserve National Bank, Warren, will construct a bank and office building, to cost $125,000. C. Y. Owsley, Arch., Youngstown, Ohio, is receiving bids. It will be eight stories and basement, 42x82 ft.

Wellsville, Ohio—The First M. E. Church of Wellsville is receiving bids for a church. It will be of stone, 60x114 ft. Estimated cost, $50,000.

✚Detroit, Mich.—The Board of Health has awarded the general contract to CULBERTSON & KELLY, Ford Bldg., Detroit, for constructing the hospital addition on Hamilton Blvd., at about $40,000.

Peoria, Ill.—The city plans to construct a two-story and basement addition to Whittier School. Estimated cost, $50,000.

Quincy, Ill.—The Board of Education plans to construct a grade school to cost $95,000. E. G. Bauman is Supt.

✚Streator, Ill.—The general contract for the construction of the Y. M. C. A. building has been awarded to H. TAPPENDORF, Rock Island, Ill. Noted Aug. 13.

Milwaukee, Wis.—St. Josephs Convent plans to erect a three-story chapel, 120x180 ft. Estimated cost, $250,000.

Osakis, Minn.—The School Board plans to construct a school to cost $45,000. E. N. Hamilton, Osakis, is Supt. Bd.

Independent Joint School District No. 2 is considering the construction of a grade school to cost $50,000.

St. Paul, Minn.—The Childs Co., 200 Fifth Ave., New York, plans to remodel the building at 388 Wabash St., into a restaurant. Estimated cost, $50,000.

Atchison, Kan.—St. Benedict's College, Atchison, plans to construct a building to cost $50,000. Plans are in progress. The cost will be defrayed by the alumni. Noted Sept. 17.

Atchison, Kan.—The masonic lodges building committee has rejected all bids for the construction of the proposed three-story and basement lodge and store building. Estimated cost, 50,000. Crumpacker & Wyatt, Atchison, are Archs.

Fargo, N. D.—Bids will be received, until Sept. 25, by the Board of Education for constructing a high and grade school to cost $100,000. Samuel Crabbe, City Hall, is Arch.

Kansas City, Mo.—Plans are nearing completion for the new St. Joseph's Hospital to be constructed on the block bonded by Linwood Blvd., Wabash Ave., 31st St. and Prospect St. The structure will be of reinforced concrete, six stories high and fireproof. Estimated cost, $400,000.

St. Louis, Mo.—The Missouri Baptist Sanitarium will erect a four-story and basement building. Isaac S. Taylor, Arch., Mercantile Bldg., St. Louis, is receiving bids.

Barnes' Hospital Association plans to construct a nurses' building to cost $100,000. It will be of brick, six stories and basement, 37x103 ft. Thomas C. Link, Arch., Carlton Bldg., is completing plans.

El Paso, Tex.—St. Patricks R. C. Church will erect a two-story church to cost $75,000. Rev. Father Berry, Pastor, is receiving bids.

The Cement-Gun Construction Co., 314 South Michigan Ave., Chicago, announces that it has combined the business of the Gun-crete Co. and the General Cement-Gun Co., and will not only do cement-gun construction work but also sell and lease complete equipments for this work. Carl Weber is President; John V. Schaefer, Secretary; and C. L. Dewey, Construction Manager.

Denver, Colo.—Plans have been completed for a new Y. M. C. A. building to be erected near the present building. It will be of brick. Noted Sept. 17.

Bellingham, Wash.—The Skagit Construction Co. has submitted the lowest bid to the city for constructing the proposed high school. It will be of terra cotta and brick.

Olympia, Wash.—W. P. White, Arch., Hinckley Block, Seattle, Wash., has completed plans for the three-story bank and office building to be constructed at Main and Fourth Sts. Estimated cost, $35,000.

Spokane, Wash.—H. M. Pretica, Empire Bldg., Seattle, Wash., is preparing plans for reconstructing the Pantages Theater. Estimated cost, $60,000.

Tacoma, Wash.—Heath & Gove, National Realty Bldg., Tacoma, are preparing plans for the three buildings to be constructed for the Church of the Holy Communion. Estimated cost, $135,000.

Longbeach, Calif.—The citizens will vote, Sept. 30, on the proposition to issue $400,000 in bonds for a municipal auditorium.

Los Angeles, Calif.—The Fifth Church of Christ, Scientist, plans to construct a church at La Brea Ave. and Hollywood Boulevard. It will be of brick. Estimated cost, $100,000.

San Francisco, Calif.—W. H. Crim, 425 Kearny St., San Francisco, has completed plans for the five-story brick hotel to be constructed at 12th and Market Sts., for I. I. De Hall. Estimated cost, $100,000.

Reid Bros., Archs., California Pacific Bldg., San Francisco, have completed plans for the three-story reinforced concrete addition to the Lourline Baths at Bush St. Estimated cost, $100,000.

Ventura, Calif.—Ventura County plans to construct a two-story hospital, 90x175 ft. Plans are nearing completion.

✚Montreal, Que.—The contract has been awarded to the C. E. DEAKIN & CO., LTD., for constructing new buildings for the Catholic Orphanage in connection with the Order of Grey Nuns, Montreal, at about $120,000.

✚Berlin, Ont.—The contract has been awarded to P. H. SECORD & SONS, LTD., Brantford, Ont., for constructing the Merchants' Bank building, Berlin.

Toronto, Ont.—Bids will be received by the city, until Sept. 25, for the construction of two schools and for alterations for various schools.

✚Toronto, Ont.—Contracts for constructing a cottage in connection with the buildings at the jail farm, Yonge St., have been awarded as follows: Masonry, to TEAGLE & SON, at $47,500; plumbing, heating and wiring, to the F. ARMSTRONG CO., at $14,500.

✚Bassano, Alta.—The Department of Public Works, Ottawa, Ont., has awarded the contract to M. C. SACKRIDER, Medicine Hat, Alta., for constructing a public building at Bassano.

Mr. Roger DeLand, French Lecturer in Municipal Engineering, McGill University, Montreal, Canada, would like to receive catalogs and other literature from manufacturers of sewer pipe, sheet steel piling, castings, trenching machinery and other apparatus and supplies used in sewer construction. These to be used in the course in municipal engineering at the university.

BARGE CANAL WORK, ALBANY, N. Y.

Bids were received Aug. 25, by Duncan W. Peck, State Supt. Pub. Wks. for Barge Canal Contract 46-A, constructing Erie Canal from Fox Ridge to the Montezuma Aqueduct, and Contract 125, Erie Canal, Sect. 2, constructing Visschers Ferry Road viaduct over the Troy-Schenectady branch of the New York Central R.R., from (A) James Stewart & Co., Inc., New York; (B) Sherman Stalter Co., Cleveland, Ohio; (C) New York State Dredging Corporation, Rochester; (D) Great Lakes Dredge & Dock Co., Buffalo; (E) Eastover Construction Co., Utica; (F) Kinser Construction Co., East St. Louis, Ill.; (G) Maryland Dredging & Contracting Co., Baltimore, Md.; (H) Merrill-Ruckgaber Co., New York; (I) Frank L. Cohen, Buffalo; (J) Drake & Dean Co., Inc., Buffalo; (K) Walsh Construction Co., Davenport, Iowa; (L) Whitehead & Kales Iron Works, Detroit, Mich.; (M) Ford & Green, Schenectady; (N) State Highway Construction Co., Boston; (O) Lupfer & Remick, Buffalo; (P) Keith & Guthrie, Schenectady. The item bids were as follows:

CONTRACT 46-A

	A	B	C	D	E	F	G
Clearing (lump sum)	$100.00	$100.00	$100.00	$100.00	$100.00	$100.00	$120.00
783,000 cu.yd. excavation	0.224	0.35	0.37½	0.27½	0.28	0.32	0.34
9.4 M. ft. b.m. sheeting and bracing	50.00	50.00	60.00	50.00	50.00	50.00	60.00
130 cu.yd. forming embankment	0.15	0.15	0.15	0.15	0.15	0.15	0.18
1620 lin.ft. foundation piles	0.35	0.35	0.38	0.35	0.35	0.35	0.42
10.7 M. ft. b.m. wooden sheet piling	50.00	50.00	60.00	51.00	50.00	50.00	60.00
8400 sq.ft. first quality steel sheet piling	1.00	0.90	1.05	1.00	1.00	1.00	1.20
2850 sq.ft. second quality steel sheet piling	0.20	0.20	0.20	0.20	0.20	0.20	0.24
310 cu.yd. second-class concrete	8.00	8.00	8.00	8.00	8.00	8.00	9.60
1800 cu.yd. second-class rip-rap	3.50	3.50	3.90	3.50	3.50	3.50	4.20
Cofferdams, pumping, bailing, draining (lump sum)	1300.00	1300.00	1000.00	1300.00	1300.00	1300.00	1560.00
Extended totals	$196,133	$293,951	$315,456	$236,066	$239,981	$271,301	$291,110

CONTRACT 125

	H	I	J	K	L	M	N	O	P
14,600 cu.yd. excavation	$0.45	$0.40	$0.36	$0.38	$0.42	$0.40	$0.40	$0.45	$0.40
8.5 M. ft. b.m. sheeting and bracing	45.00	40.00	40.00	40.00	47.00	40.00	40.00	35.00	45.00
260 cu.yd. lining	1.50	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.2½
5380 lin.ft. foundation piles	0.25	0.20	0.36	0.25	0.32	0.25	0.25	0.10	0.25
680 cu.yd. second-class concrete	9.00	9.25	7.50	7.50	8.00	6.50	9.60	8.02	
370 cu.yd. first-class reinforced concrete	11.00	12.50	11.74	12.50	14.00	13.50	12.50	10.00	12.55
63,000 lb. metal reinforcement	0.02½	0.02½	0.0275	0.02½	0.03½	0.03	0.0275	0.02½	0.020
910 cu.yd. third-class rip-rap	2.50	1.50	2.50	2.50	2.50	2.50	2.50	1.00	2.00
90 sq.yd. cobblestone paving	1.25	1.00	1.50	1.50	1.75	1.50	1.50	1.50	1.50
910 lin.ft. wooden fence	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
593,000 lb. structural steel	0.04	0.03½	0.0355	0.035	0.0345	0.03	0.03½	0.038	0.031
1100 sq.yd. bituminous surfacing	0.25	0.30	0.31	0.30	0.30	0.30	0.30	0.30	0.30
80 cu.yd. removing existing masonry	2.50	1.50	2.50	2.00	4.00	3.00	3.00	3.00	3.00
Maintaining highway traffic (lump sum)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	120.00	75.00
Maintaining railroad traffic (lump sum)	100.00	10.00	100.00	100.00	100.00	100.00	100.00	120.00	75.00
Totals	$47,402	$44,643	$43,529	$43,163	$45,097	$43,216	$42,855	$44,215	$41,267

RAPID TRANSIT SYSTEM, NEW YORK, N. Y.

Section 21, Route 48

Bids were received Sept. 15 by the Public Service Commission for constructing Sect. 21, Route 48, of the Park Place, William and Clark St. subway, a part of the Seventh Ave.-Lexington Ave. rapid transit system from: (A), Smith, Hauser & Masisaacs; (B), Rapid Transit Subway Construction Co.; (C), Frederick L. Cranford, Inc.; (D), Underpinning & Foundation Co.; (E), Holbrook, Cabot & Rollins Corporation; (F), Oscar Daniels Co. The item bids were as follows:

	A	B	C	D	E	F
82,000 cu.yd. earth excavation above mean high water	$5.50	$6.00	$6.06	$6.15	$5.00	$8.50
29,500 cu.yd. earth excavation below mean high water	8.50	6.00	6.06	8.00	6.00	9.00
7000 cu.yd. earth excavation (sewers) above and below mean high water	7.00	6.00	6.06	5.00	5.06	8.50
Underpinning Building Nos. 165 to 167 William St. (lump sum)	20,000.00	25,000.00	30,000.00	50,000.00	18,000.00	100,000.00
Underpinning building Nos. 157 to 163 William St. lump sum)	10,000.00	10,000.00	7,360.00	4,000.00	6,000.00	10,000.00
Underpinning building Nos. 164 to 168 William St. (lump sum)	8,000.00	8,000.00	3,900.00	3,500.00	5,000.00	10,000.00
Underpinning Building Bo. 162 William St. (lump sum)	2,500.00	3,000.00	1,440.00	750.00	1,900.00	5,000.00
Underpinning building Nos. 156 to 160 William St. (lump sum)	8,500.00	8,000.00	6,560.00	4,000.00	6,000.00	9,000.00
Underpinning building Nos. 145 to 155 William St. (lump sum)	15,000.00	15,000.00	9,440.00	5,500.00	9,000.00	16,000.00
Underpinning building Nos. 144 to 154 William St. (lump sum)	12,000.00	15,000.00	9,600.00	8,000.00	9,000.00	12,000.00
Underpinning building Nos. 135 to 141 William St. (lump sum)	12,000.00	28,500.00	16,800.00	24,000.00	10,600.00	38,000.00
Underpinning building Nos. 123 to 133 William St. (lump sum)	26,000.00	39,000.00	26,000.00	24,000.00	19,500.00	38,000.00
Underpinning building Nos. 111 to 121 William St. (lump sum)	24,000.00	24,000.00	16,120.00	9,000.00	10,500.00	33,000.00
Underpinning building Nos. 122 to 140 William St. (lump sum)	20,000.00	20,000.00	16,000.00	12,000.00	15,000.00	28,000.00
Underpinning building Nos. 120 William St. (lump sum)	3,000.00	4,000.00	2,400.00	4,000.00	2,500.00	8,000.00
Underpinning building Nos. 118 William St. (lump sum)	5,000.00	4,000.00	2,750.00	1,500.00	1,900.00	8,000.00
Underpinning building No. 116 William St. (lump sum)	7,500.00	5,000.00	3,080.00	1,500.00	2,300.00	9,000.00
Underpinning building Nos. 110 to 114 William St. (lump sum)	7,500.00	8,000.00	6,820.00	3,000.00	4,500.00	8,000.00
Underpinning building Nos. 107 to 109 William St. (lump sum)	4,000.00	3,500.00	3,025.00	2,000.00	1,900.00	2,500.00
Underpinning building Nos. 103 to 105 William St. (lump sum)	5,000.00	5,500.00	4,620.00	3,000.00	3,400.00	6,000.00
Underpinning building Nos. 99 to 101 William St. (lump sum)	5,000.00	4,000.00	3,800.00	2,500.00	2,600.00	3,000.00
Underpinning building Nos. 93 to 97 William St. (lump sum)	12,000.00	20,000.00	15,000.00	15,000.00	37,500.00	56,000.00
Underpinning building Nos. 91 William St. (lump sum)	5,000.00	4,500.00	4,500.00	12,000.00	9,400.00	23,000.00
Underpinning building Nos. 85 to 89 William St. (lump sum)	8,000.00	10,000.00	7,900.00	6,500.00	8,000.00	7,000.00
Underpinning building No. 100 William St. (lump sum)	25,000.00	36,000.00	25,200.00	30,000.00	84,000.00	40,000.00
Underpinning building No. 92 William St. (lump sum)	8,000.00	10,000.00	8,250.00	12,000.00	21,900.00	18,000.00
Underpinning building No. 90 William St. (lump sum)	6,000.00	5,500.00	4,480.00	8,000.00	18,700.00	15,000.00
Underpinning building Nos. 84 to 88 William St. (lump sum)	4,400.00	3,750.00	2,100.00	2,500.00	70.00	1,000.00
Underpinning building Nos. 81 to 83 William St. (lump sum)	8,000.00	15,500.00	15,600.00	15,000.00	30,000.00	30,000.00
Underpinning building Nos. 80 to 82 William St. (lump sum)	4,500.00	5,000.00	14,000.00	6,000.00	43,800.00	16,000.00
Underpinning building Nos. 71 to 77 William St. (lump sum)	10,000.00	12,000.00	10,000.00	8,000.00	12,000.00	10,000.00
Underpinning building Nos. 67 to 69 William St. (lump sum)	3,000.00	4,000.00	16,800.00	6,000.00	31,200.00	18,000.00
Underpinning building Nos. 74 to 78 William St. (lump sum)	3,600.00	4,500.00	9,760.00	5,000.00	37,500.00	12,000.00
Underpinning building No. 72 William St. (lump sum)	2,200.00	3,000.00	2,200.00	1,500.00	1,800.00	5,000.00
Underpinning building Nos. 68 to 70 William St. (lump sum)	11,000.00	20,000.00	16,500.00	20,000.00	37,500.00	22,000.00
Underpinning building Nos. 61 to 63 William St. (lump sum)	4,500.00	7,000.00	5,170.00	4,000.00	3,500.00	6,000.00
Underpinning building Nos. 57 to 59 William St. (lump sum)	7,000.00	6,800.00	6,930.00	6,500.00	5,200.00	23,000.00
Underpinning building No. 55 William St. (lump sum)	10,000.00	20,000.00	13,020.00	7,500.00	15,000.00	32,000.00
Underpinning building Nos. 62 to 64 William St. (lump sum)	6,000.00	10,000.00	9,600.00	8,000.00	4,400.00	85,000.00
Underpinning building No. 60 William St. (lump sum)	3,000.00	5,000.00	4,800.00	2,000.00	2,200.00	7,000.00
Underpinning building Nos. 56 to 58 William St. (lump sum)	10,000.00	16,000.00	8,580.00	7,500.00	6,000.00	29,000.00
Underpinning building Nos. 51 to 53 William St. (lump sum)	5,000.00	9,000.00	5,170.00	3,500.00	3,400.00	8,000.00
Underpinning building Nos. 45 to 49 William St. (lump sum)	12,000.00	18,000.00	17,000.00	12,000.00	43,800.00	26,000.00
Underpinning building Nos. 44 to 46 Wall St. (lump sum)	25,000.00	25,000.00	21,250.00	17,500.00	53,100.00	30,000.00
Underpinning building Nos. 52 to 54 William St. (lump sum)	32,000.00	40,000.00	70,000.00	60,000.00	187,500.00	185,000.00
Underpinning building No. 48 Wall St. (lump sum)	12,000.00	25,000.00	20,160.00	11,000.00	9,400.00	40,000.00
Underpinning building Nos. 37 to 39 William St. (lump sum)	5,000.00	7,000.00	9,230.00	6,500.00	145.00	2,000.00
Underpinning building Nos. 39 to 41 Exchange Pl. (lump sum)	1,000.00	1,500.00	2,000.00	750.00	50.00	500.00
Underpinning building No. 55 Wall St. (lump sum)	30,000.00	45,000.00	126,000.00	32,000.00	28,500.00	65,000.00
Underpinning building Nos. 25 to 29 William St. (lump sum)	15,000.00	10,000.00	21,300.00	20,000.00	75.00	50,000.00
Underpinning building No. 23 William St. (lump sum)	3,600.00	2,400.00	1,680.00	2,000.00	2,500.00	5,000.00
Underpinning building Nos. 17 to 21 William St. (lump sum)	6,000.00	5,000.00	4,260.00	2,500.00	70.00	1,000.00
Underpinning building Nos. 11 to 15 William St. (lump sum)	5,000.00	2,500.00	3,150.00	12,000.00	31,200.00	20,000.00
Underpinning building Nos. 26 to 28 William St. (lump sum)	20,000.00	20,000.00	28,350.00	28,000.00	53,100.00	22,000.00
Underpinning building Nos. 16 to 22 William St. (lump sum)	30,000.00	23,000.00	33,250.00	25,000.00	62,500.00	38,000.00
Underpinning Delmonico Bldg. between Beaver and South William St. (lump sum)	3,000.00	2,000.00	2,500.00	4,000.00	7,500.00	6,000.00
Underpinning Seligman Bldg. between South William and Stone Sts. (lump sum)	8,000.00	4,000.00	3,000.00	4,000.00	100.00	1,000.00
Underpinning building Nos. 60 to 62 Beaver St. (lump sum)	24,000.00	30,000.00	42,000.00	32,000.00	45,000.00	50,000.00
Underpinning Old Cotton Exchange between Stone and Pearl Sts. (lump sum)	14,700.00	18,000.00	9,855.00	15,000.00	26,300.00	28,000.00
Underpinning building No. 31 Beekman St. (lump sum)	4,500.00	2,500.00	2,400.00	4,000.00	3,000.00	8,000.00
Underpinning building No. 31 Beekman St., Nos. 34 to 38 Beekman St. (lump sum)						
18,900 cu.yd. concrete masonry	10.00	8.50	9.00	11.00	8.50	13.50
4400 cu.yd. protective concrete masonry outside water proofing	10.00	8.50	9.00	11.00	6.50	13.50
1750 cu.yd. rubble stone masonry	8.00	8.00	8.00	10.50	6.00	8.00
50 cu.yd. dry rubble masonry	8.00	7.00	6.00	10.00	4.00	5.00
30 cu.yd. brick masonry	25.00	15.00	20.00	29.00	15.00	20.00
100 cu.yd. removal of old masonry	100.00	15.00	50.00	500.00	10.00	100.00
20 cu.yd. hollow terra-cotta brick masonry	20.00	15.00	15.00	40.00	15.00	15.00
1000 bbl. grout of portland cement	3.50	3.50	2.00	3.00	1.50	2.50
16,000 lin.ft. timber piles	1.50	0.75	0.75	2.00	0.65	0.80
2 M. ft. b.m. timber foundation	150.00	75.00	75.00	50.00	60.00	70.00
100 cu.yd. broken stone or gravel	3.00	3.00	2.50	3.50	2.00	2.00
23,400 sq.yd. waterproofing, 1-ply	0.60	0.60	0.50	0.50	0.30	0.50
100 sq.yd. waterproofing, 2-ply	0.85	0.75	0.70	0.90	0.45	0.80
12,700 sq.yd. waterproofing, 3-ply	1.20	1.00	0.85	1.30	0.70	1.20
100 sq.yd. waterproofing, 4-ply	1.30	1.50	1.00	1.70	0.90	1.50
100 sq.yd. waterproofing, 5-ply	1.50	2.00	1.25	2.10	1.15	2.00
100 sq.yd. waterproofing, 6-ply	1.75	2.50	1.50	2.50	1.35	2.40
100 sq.yd. waterproofing, dry ply	0.60	0.50	0.35	0.45	0.20	0.50
3500 cu.yd. brick in asphalt mastic	30.00	27.00	25.00	25.00	24.00	35.00
100 lin.ft. vitrified drain pipe, 12-in.	1.00	0.75	1.00	1.50	0.70	1.50
100 lin.ft. vitrified drain pipe, 10-in.	0.80	0.60	0.80	1.30	0.65	1.25
2700 lin.ft. vitrified drain pipe, 8-in.	0.75	0.50	0.70	1.00	0.55	1.00
100 lin.ft. vitrified drain pipe, 6-in.	0.70	0.40	0.60	0.70	0.50	0.90
100 lin.ft. vitrified drain pipe, 4-in.	0.60	0.35	0.50	0.50	0.45	0.80
100 lin.ft. c.i. drain pipe, 6-in.	1.50	1.00	1.00	2.30	0.70	1.50
1000 lin.ft. c.i. drain pipe, 4-in.	1.00	0.75	0.75	1.50	0.65	1.00
100 lin.ft. c.i. drain pipe, 10-in.	2.50	2.00	1.50	3.00	1.25	3.00
50 lin.ft. c.i. pipe and fittings, 3-in. extra heavy	0.80	0.80	1.00	1.15	1.00	1.00
70 lin.ft. c.i. pipe and fittings, 4-in. extra heavy	1.00	1.00	1.25	1.50	1.25	1.30
65 lin.ft. c.i. pipe and fittings, 6-in. extra heavy	1.75	1.30	1.50	2.25	1.50	2.00
50 lin.ft. c.i. pipe and fittings, 8-in. extra heavy	2.50	1.80	1.75	3.00	2.00	2.50
42,000 duct. ft. tunnel ducts	0.13	0.12	0.12	0.15	0.08	0.11
33,000 duct ft. railroad ducts	0.14	0.15	0.15	0.30	0.10	0.14
1120 tons riveted steel	75.00	75.00	72.00	70.00	65.00	80.00
1980 tons steel beams and shapes	65.00	65.00	65.00	60.00	60.00	75.00
35 tons steel rods and bars	60.00	75.00	75.00	85.00	60.00	70.00
18 tons miscellaneous iron castings	90.00	65.00	75.00	85.00	60.00	70.00
2 tons miscellaneous sewer irons	150.00	70.00	100.00	85.00	60.00	70.00
450 lb. special wire forms	0.15	0.10	0.15	0.50	0.10	0.30
100 lin.ft. 1¾-in. oak or ash hand rail	0.50	0.60	0.50	1.00	0.25	0.50
3300 sq.ft. steel grating for ventilation	1.50	1.50	1.50	1.50	1.50	2.00
1600 sq.ft. vault lights	1.50	1.50	1.25	1.20	1.50	1.50
4100 sq.yd. sidewalk restored	2.00	2.50	2.50	3.50	2.00	3.00
4200 sq.yd. repavement of roadways asphalt	2.50	3.00	2.50	3.25	2.00	4.00
1950 sq.yd. repavement of roadways granite block	2.50	3.50	2.50	3.00	2.00	3.00
1400 sq.yd. repavement of roadways, asphalt block	3.00	3.50	3.00	3.75	2.00	4.00
1100 lin.ft. new blue stone curb	2.00	1.50	1.25	1.50	1.00	2.00
100 lin.ft. new 8-in. granite curb	2.00	1.75	2.50	2.50	1.50	2.00
11,000 lin.ft. ¾-in. w.i. electric conduits	0.20	0.25	0.30	0.20	0.15	0.20

RAPID TRANSIT SYSTEM—(Continued)

	A	B	C	D	E	F
500 lin.ft. 1¼-in. w.i. electric conduits	0.40	0.40	0.40	0.40	0.25	0.[illegible]
550 lin.ft. 2-in. w.i. electric conduits	0.55	0.50	0.50	0.50	0.20	0.[illegible]
2000 lin.ft. 1-in. w.i. electric conduits	0.30	0.30	0.40	0.25	0.20	0.[illegible]
675 c.i. outlet boxes in stations	1.00	1.00	1.25	1.50	0.70	1.[illegible]
275 lin.ft. 6-in. c.i. pipe and fittings in station extra heavy	1.75	1.50	3.00	2.00	1.50	2.[illegible]
110 lin.ft. 3-in. c.i. pipe and fittings in station extra heavy	1.50	1.00	2.00	1.00	1.25	1.[illegible]
1200 lin.ft. vitrified pipe sewer, 12-in.	2.50	3.00	3.00	5.00	2.40	3.[illegible]
1150 lin.ft. vitrified pipe sewer, 15-in.	3.00	3.70	3.50	6.00	2.85	3.[illegible]
400 lin.ft. vitrified sewer, 18-in.	3.50	4.30	4.00	6.25	3.35	4.[illegible]
50 lin.ft. vitrified pipe sewer, 20-in.	5.00	4.80	5.00	6.50	3.65	5.[illegible]
50 lin.ft. vitrified pipe sewer, 24-in.	6.00	5.50	6.00	7.00	4.70	6.[illegible]
21-ton c.i. sewer pipe, straight	60.00	46.00	40.00	50.00	35.00	40.[illegible]
10 tons c.i. sewer pipe, special	100.00	70.00	75.00	100.00	75.00	70.[illegible]
730 lin.ft. egg-shaped masonry sewer, 3 ft. 6 in. x 2 ft. 4 in.	12.00	7.00	10.00	8.00	5.00	7.[illegible]
650 lin.ft. circular masonry sewer, 4 ft. 6 in.	15.00	10.00	15.00	9.00	6.50	8.[illegible]
2 electric railroad columns supported entirely upon the railroad structure	2000.00	1000.00	1000.00	1500.00	1200.00	3000.[illegible]
2 electric railroad columns supported partly or entirely off railroad structure	2000.00	1000.00	1000.00	1000.00	1000.00	3000.[illegible]
700 lin.ft. water pipe, 6-in.	1.50	1.25	1.50	0.60	0.75	2.00
2500 lin.ft. water pipe, 12-in.	2.00	2.00	2.50	1.20	2.25	2.50
100 lin.ft. water pipe, 16-in.	5.00	3.00	3.00	1.60	3.00	3.50
50 service connection for water pipes all sizes	20.00	25.00	20.00	25.00	25.00	10.00
200 lin.ft. c.i. gas pipe, 4-in.	1.00	0.65	1.00	0.50	0.65	0.80
3000 lin.ft. c.i. gas pipe, 6-in.	1.50	1.10	1.00	0.60	1.15	1.30
700 lin.ft. c.i. gas pipe, 8-in.	1.50	1.50	1.50	0.80	1.25	1.50
100 lin.ft. c.i. gas pipe, 10-in.	2.00	1.75	1.60	1.00	1.75	2.00
2000 lin.ft. c.i. gas pipe, 12-in.	2.00	2.25	1.80	1.20	2.00	3.00
100 lin.ft. c.i. gas pipe, 20-in.	4.00	3.75	2.50	2.00	4.35	5.00
200 lin.ft. c.i. gas pipe, 24-in.	5.00	5.00	4.00	2.40	4.70	5.50
6000 lin.ft. w.i. by passing pipe, 8-in.	5.00	5.00	2.50	4.00	2.80	4.00
100 lin.ft. w.i. by passing pipe, 16-in.	10.00	8.00	5.00	7.00	8.10	9.00
100 lin.ft. w.i. by passing pipe on trestle, 16-in.	10.00	12.00	6.00	7.00	9.00	9.00
450 lin.ft. w.i. by passing pipe on trestle, 20-in.	12.00	16.00	6.00	8.50	10.20	12.00
200 lin.ft. w.i. by passing pipe on trestle, 8-in.	8.00	6.00	2.50	6.00	3.00	4.00
700 lin.ft. trestle to support by passing pipes	8.00	4.00	3.00	3.00	2.00	3.00
50 service connect. for gas pipes all sizes	20.00	20.00	20.00	25.00	10.00	5.00
50 tons c.i. hub and spigot pipe, straight	75.00	40.00	40.00	50.00	30.00	35.00
15 tons c.i. hub and spigot pipe, special	100.00	75.00	80.00	100.00	60.00	70.00
500 lin.ft. 8-in. high pressure fire system water pipe	2.00	3.00	2.00	8.00	2.00	2.50
600 lin.ft. 12-in. high pressure fire system water pipe	6.00	4.00	3.00	10.00	3.50	3.00
2200 lin.ft. 16-in. high pressure fire system water pipe	8.00	5.00	3.00	7.00	6.35	4.00
40 tons c.i. spigot and groove high pressure pipe, straight	75.00	45.00	50.00	50.00	30.00	35.00
30 tons c.i. spigot and groove high pressure pipe, special	100.00	80.00	80.00	100.00	75.00	70.00
200 lin.ft. steam pipe, 6-in.	10.00	6.00	7.00	5.00	20.00	2.50
200 lin.ft. steam pipe, 8-in.	12.00	8.00	9.00	6.00	22.00	3.00
200 lin.ft. steam pipe, 10-in.	15.00	10.00	11.00	7.00	24.00	4.00
600 lin.ft. steam pipe, 12-in.	16.00	12.00	12.00	8.00	25.00	5.00
200 lin.ft. steam pipe, 15-in.	20.00	15.00	15.00	10.00	27.00	5.50
20 steam pipe service connection	75.00	200.00	70.00	15.00	100.00	10.00
100 lin.ft. new steam pipe, 6-in.	150.00	650.00	7.00	3.00	6.00	1.00
100 lin.ft. new steam pipe, 8-in.	2.00	9.00	9.00	4.00	8.00	2.00
100 lin.ft. new steam pipe, 10-in.	3.00	12.00	11.00	5.00	10.00	2.50
100 lin.ft. new steam pipe, 12-in.	4.00	16.00	12.00	6.00	13.00	3.50
100 lin.ft. new steam pipe, 15-in.	5.00	24.00	15.00	7.00	17.00	4.00
1100 lin.ft. air pipe, 6-in.	0.75	1.25	1.00	0.80	0.50	1.50
100 lin.ft. new air pipe, special, 6-in.	0.75	2.50	1.50	1.00	0.75	1.00
3500 lin.ft. mail tube, 8-in.	3.00	3.00	5.00	1.50	5.00	3.00
400 lin.ft. postal tube in place, 2½-in.	2.00	1.50	2.50	2.00	0.50	1.50
100 lin.ft. postal tube in place, new 2½-in.	2.00	2.00	2.00	1.30	2.00	1.00
200 lin.ft. new mail tube straight, 8-in.	4.00	3.00	5.00	3.00	10.00	3.00
100 lin.ft. new mail tube, curved, 8-in.	6.00	7.00	6.00	15.00	25.00	5.00
400 lin.ft. Western Union tube, 2½-in.	2.00	1.50	2.50	2.00	0.50	1.00
100 lin.ft. new Western Union tube, 2½-in.	2.00	2.00	2.00	1.30	5.00	1.00
18,000 duct ft. electric ducts and conduits	0.50	0.60	0.75	1.00	0.75	0.30
7000 lin.ft. w.i. pipe, electric ducts and conduits, 2½-in.	0.50	0.60	1.00	1.00	0.50	0.30
15,000 lin.ft. w.i. pipe, electric ducts and conduits, 3-in.	0.60	0.65	1.00	1.10	0.55	0.30
4500 lin.ft. w.i. pipe, electric ducts and conduits, 3½-in.	0.90	0.70	1.25	1.20	0.65	0.30
500 lin.ft. w.i. pipe, electric ducts and conduits, 4-in.	1.25	0.75	1.50	1.50	0.80	0.30
500 lin.ft. w.i. pipe, electric ducts and conduits, 4½-in.	1.75	0.80	1.50	1.75	1.00	0.30
3000 lin.ft. Edison conduits, 2-in.	0.50	0.50	1.00	2.00	1.00	0.30
1600 lin.ft. Edison conduits, 2½-in.	0.50	0.60	1.00	2.50	1.25	0.30
700 lin.ft. Edison conduits, 3-in.	0.60	0.70	1.25	2.75	1.50	0.30
50 electric ducts service connections all sizes	20.00	20.00	25.00	35.00	25.00	20.00
Extended totals	$2,254,670	$2,268,858	$2,325,109	$2,369,826	$2,466,477	$3,378,588

The R. G. Packard Co., builder of dredging machinery, have moved from its New York office at 130 Pearl St., to its works and basin at the foot of East 28th St., Bayonne, N. J.

Harry H. Wehmeyer, 1004 West Lehigh Ave., Philadelphia, Penn., contractor and builder, is estimating on the construction of the United States post offices at Jellico and Shelbyville, Tenn., bids to be received Oct. 14 and 13, respectively, and would like to receive catalogs and prices for structural materials.

ENLARGING POND, ATLANTIC CITY, N. J.

Bids were received by the city, Sept. 10, for enlarging Lower Doughty Pond from (A) Sutton & Corson, (B) Atlantic Construction & Supply Co., (C) American Paving & Construction Co., (D) Charles L. Eastburn Co., (E) E. L. Bader Co. The item bids were as follows:

	A	B	C	D	E
30,000 cu.yd. embankment	$0.58	$0.75	$0.75	$0.65	$0.75
24,100 sq.ft. steel sheet piling	1.00	.90	1.10	.92	.90
20 cu.yd. cement grout	93.75	50.00	10.00	9.60	20.00
24,100 lin.ft. wood stripping	.02	.045	.05	.02	.10
1577 cu.yd. concrete in spillway	11.88	14.00	20.00	8.33	16.00
1000 lb. reinforcing steel	.15	.04	.05	.18	.05
59 expansion bolts	1.25	5.00	1.00	2.18	5.40
15 cu.yd. concrete wood stave collar	29.75	15.00	35.00	12.00	30.00
2575 yd. concrete core wall	8.90	8.00	12.00	6.86	7.60
					per M. ft.
13,000 ft. B. M. lumber	.045	.035	.04	.05	40.00
Bridge from bank to intake (lump sum)	224.06	425.00	300.00	140.00	183.00
3800 lin.ft. piling, spillway foundation	.38	.35	.40	.30	.30
					per M. ft.
9000 ft. B. M. in spillway foundation	.065	.045	.08	.05	40.00
27 acres submerged to clean (lump sum)	13,600.00	15,000.00	10,400.00	.....	.....
250 acres to be grubbed	550.50	350.00	150.00	300.00	175.00
36,000 sq.ft. concrete lining	.25	.15	.18	.14	.15
100 cu.yd. concrete not in plans	....	....	....	....	....
100 cu.yd. excavation not in plans	9.10	12.00	12.00	10.00	6.00
500 lb. steel rods not in plans	.60	2.00	2.00	1.00	2.00
5000 ft. B. M. not in plans	.15	.04	.05	.045	.06
					per M. ft.
					40.00
Extended totals	$253,916	$203,597	$174,014	$162,822	$151,503

The Max Ams Machine Co., Mt. Vernon, N. Y., is erecting an additional plant at Bridgeport, Conn., to take care of its increasing business, especially the export trade through its representatives in South Africa, Australia, India, China, Japan, South America, England and the continent. The area is approximately fifteen acres, on which a modern plant, equipped with every facility is being erected.

The main shop and adjacent saw tooth sections, will contain every modern tool and device that the progress of the industry requires. The main erecting shop will be provided with 25-ton electric cranes, and railroad sidings will run into the plant to facilitate the handling of large units.

In addition to these buildings, there will be a special administration building three stories high, for the general and private offices and drafting room. This building will be connected by means of bridges with the works. The power and heating plants will be in separate buildings.

The welfare of the employees of the company will be looked after by the erection of a special recreation building and the laying out of baseball grounds and tennis courts.

The output of the concern is largely machinery for the making of tin containers, applied more particularly to the food industry. It likewise builds an extensive line of power presses for the sheet metal working industry. The company expects to occupy its new home about February 1915.

WAYNE ST. VIADUCT, BUTLER, PENN.

Bids were received Aug. 25, by H. O. Carson, City Engr., for constructing the Wayne St. viaduct, from (A) Dravo Contracting Co., Pittsburgh; (B) Pittsburgh Construction Co., Pittsburgh; (C) Penn Bridge Co., Beaver Falls. The item bids were as follows:

	A	B	C
1260 cu.yd. concrete, including drains in abutments and pedestals	$8.00	$18.00	$9.00
120 cu.yd. concrete in pedestals	13.00	18.00	10.00
70 cu.yd. concrete including encased piles in pedestals	11.00	18.00	35.00
1690 cu.yd. earth fill between retaining wall	0.80	1.25	1.00
1920 lin.ft. concrete piles, premolded	3.40	1.75	2.50
3900 lb. anchor bolts and washers	0.45	0.0325	0.04
792 sq.yd. pavement on approaches	2.40	2.50	3.00
15 cu.yd. curbs on approaches	12.50	16.50	10.00
2160 sq.ft. sidewalk slab on approaches	0.19	0.25	0.12
1,760,000 lb. structural steel	0.03¾	0.0325	0.0345
66,900 lb. hand railing	0.05	0.045	0.05
256 c.i. hand railing posts	17.50	15.00	10.00
256 structural hand railing posts	6.90	6.00	5.00
24 lamp posts	31.00	30.00	30.00
192,000 lb. rails, ties, bonds and fastenings	0.034	0.03	0.23
134,000 lb. reinforcing metal	0.036	0.035	0.265
825 cu.yd. concrete in sidewalk and roadway slab on viaduct proper and stairway	11.80	16.00	11.40
170 lin.ft. wainwright curb bar	0.25	0.40	0.25
Lighting system complete (lump sum)	1875.00	1000.00	1500.00
48,000 sq.ft. concrete encasement of steel work	0.17	0.16	0.25
31,000 sq.ft. waterproofing material	0.065	0.06	0.06
3450 sq.yd. lug block	2.90	2.80	2.80
3450 sq.yd. rectangular block	2.75	2.75	2.45
Extended totals with c.i. hand railing posts and lug block	$115,580	$113,263	$113,921
Extended totals with c.i. hand railing posts and rectangular block	115,062	[illegible]	112,713
Extended totals with structural hand railing and lug block	112,866	110,959	112,640
Extended totals with structural hand railing and rectangular block	112,349	110,786	111,433

American Needs—Wilbur F. Wakeman, general secretary of the American Protective Tariff League, has sent out a letter to American producers requesting them to report any article or articles (raw material or finished product) of use in agriculture, mining or manufacture in the United States, for the supply of which we are dependent upon any foreign country. From the replies received the following tabulation has been made:

Agates	Molston
Alkali	Oil, recovered
Aluminum	Oil, olive
Amber	Oil, sizing
Analine dyes	Oil, finishing
Antimony	Ozocerite
Asphaltum	Potash, crude
Barytes	Potash, carbonate of
Bearings	Potash, caustic of
Bleaching powder	Potash, hydrated carbonate of
Bronze powder	Potash, nitrate of
Carbolic acid	Potash, permanganate of
Card clothing	Pumice, lumps
Chamois skins	Pumice, powdered
China clay	Potato starch
Clay, washed	Rubber blankets
Clay marbles	Salt
Cotton, Egyptian	Saltpeter
Cyanides	Scheelite, concentrates
Duplex paper	Silex lining
Egg albumen	Skins, sheep and calf
Emery paper	Shellac
Epsom salts	Silk, artificial
Ferro-manganese	Soapstone pencils and bricks
Flint pebbles	Solder
Gallic acid	Sugar
Hemp	Talc
Jute	Tin, bars, blocks, pigs
Kieserite	Tin, grain or granulated
Leather skins	Tinfoil
Linen	Transfer paper
Lime, Vienna	Tungsten
Lithographic tusch	Vanadium
Magnesia	Walrus hide
Magnesite	Watch crystals
Manganese	Windshields
Mica	Wool
Moleskins	Zinc dust

CATALOG NOTICES

The Galion Iron Works Co., Galion, Ohio. Catalog No. 17. Cast iron and corrugated culvert pipe, road grading machines, rollers, scrapers, tractors, crushers, scarifiers, etc. Illustrated, 60 pp., 6x9 in. Catalog No. 18. Stone crushing machinery. Illustrated, 96 pp., 6x9 in.

Ransome Concrete Machinery Co., Dunellen, N. J. Catalog. Concrete machinery. Illustrated, 80 pp., 6x9 in.

Smooth-On Mfg. Co., 572-74 Communipaw Ave., Jersey City, N. J. Smooth-On Instruction Book No. 15. Iron cements, iron paints, corrugated iron gaskets. Illustrated, 104 pp., 4½x6½ in.

Essex Foundry Co., Newark, N. J. Catalog D. Drainage fittings. Illustrated, 52 pp., 6x9 in.

General Filtration Co., Rochester, N. Y. Pamphlet. Filtros. Porous filtering medium. 16 pp., 3½x6 in.

Ingersoll-Rand Co., 11 Broadway, New York. Form No. 3024. Ingersoll-Rogler valves for air compressing cylinders. Illustrated, 28 pp., 6x9 in. Form No. 3030. Class ER-1 Ingersoll-Rogler air compressors. Illustrated, 20 pp., 6x9 in

BARGE CANAL WORK, ALBANY, N. Y.

Bids were received Aug. 11 by Duncan W. Peck, State Supt. Pub. Wks., for constructing a bridge over the Erie Canal in Yorkville, Oneida County, from (A) W. J. Burns Co., Syracuse; (B) Charles Kiehm, Utica; (C) I. M. Ludington's Sons, Inc., Rochester; (D) Harry W. Roberts & Co., Utica; (E) William F. Cogley, Utica; (F) Eastover Construction Co., Utica; (G) Scott Bros., Rome; (H) Lupfer & Remick, Buffalo; (I) Beebe & Parker, Utica; (J) John M. Holler, Albany; (K) Frank L. Cohen, Buffalo; (L) Walsh Construction Co., Davenport, Iowa. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J	K	L
Cofferdams, pumping, bailing, and draining (lump sum)	$6300	$3000	$5600	$5300	$5600	$2400	$5600	$6700	$50.00	$5600	$4000	$4500
27,400 cu.yd. excavation	0.70	0.60	0.65	0.75	0.61	0.75	0.50	0.46	0.75	0.62	0.60	0.45
25 M. ft. b.m. sheeting and bracing	50.00	50.00	40.00	50.00	50.00	50.00	45.00	50.00	50.00	50.00	50.00	50.00
1276 cu.yd. lining	1.50	1.50	1.50	1.50	1.20	1.50	1.25	1.50	1.50	1.50	1.50	1.50
8500 lin.ft. foundation piles	0.30	0.35	0.30	0.30	0.30	0.35	0.20	0.25	0.30	0.30	0.30	0.25
2066 cuyd. second-class concrete	7.00	8.80	7.00	7.00	8.00	8.00	8.00	8.00	7.50	7.50	7.00	7.00
240 cu.yd. first-class reinforced concrete	13.00	13.00	14.00	13.00	15.00	14.00	14.00	10.00	14.00	14.00	12.00	14.00
45,260 lb. metal reinforcement	0.035	0.035	0.03	0.035	0.034	0.035	0.03	0.03	0.035	0.03	0.03	0.025
100 sq.yd. cobblestone gutter	0.75	0.75	0.75	0.75	1.00	0.75	0.75	0.75	0.75	0.75	0.75	0.70
2572 lin.ft. wooden fence	0.25	0.25	0.25	0.25	0.30	0.30	0.30	0.25	0.25	0.25	025	0.25
2872 sq.ft. concrete sidewalk	0.25	0.18	0.25	0.20	0.20	0.25	0.25	0.25	0.16	0.25	0.20	0.20
780,000 lb. structural steel	0.0415	0.038	0.04	0.04	0.042	0.0354	0.039	0.041	0.0354	0.0425	0.0425	0.042
9900 lb. c.i. pipe	0.03	0.03	0.03	0.03	0.03	0.03	0.025	0.03	0.03	0.00	0.02	0.025
452 lin.ft. lattice railing	1.75	2.00	1.75	1.75	1.90	2.00	1.75	1.75	2.00	2.00	175	1.90
4270 sq.yd. bituminous macadem pavement	3.00	2.40	2.50	2.40	2.30	3.00	3.00	2.50	2.25	2.75	2.50	3.00
1620 lin.ft. concrete curb	0.80	0.65	1.00	0.75	0.75	1.00	0.75	0.70	0.80	0.80	1.00	1.00
270 lin.ft .concrete header	0.80	0.65	1.00	0.70	0.60	1.00	0.65	1.00	0.75	0.80	1.00	1.00
740 sq.yd. asphalt block pavement	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
6 oil signal lamps	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Removing existing highway bridge (lump sum)	250.00	200.00	500.00	350.00	200.00	50.00	10.00	200.00	250.00	500.00	500.00	300.00
30 cu.yd. removing existing masonry	7.00	7.00	7.00	7.00	7.00	7.00	5.00	7.00	7.00	7.00	5.00	5.00
Maintaining navigation (lump sum)	500.00	500.00	1200.00	800.00	300.00	50.00	150.00	100.00	250.00	1000.00	1000.00	600.00
Maintaining highway traffic (lump sum)	300.00	250.00	500.00	400.00	300.00	500.00	400.00	500.00	500.00	500.00	500.00	400.00
1150 lin.ft. raising or shifting railroad tracks	0.05	0.85	1.00	0.15	1.00	1.50	0.10	0.575	1.50	1.00	1.50	1.50
Extended totals	$101,461	$95,722	$99,471	$99,463	$99,599	$99,742	$94,583	$94,615	$97,302	$102,484	$98,158	$95,700

Cheney Bros., South Manchester, Conn., silk manufacturers, have had plans prepared for four buildings which will be used for the welfare of their employees. A primary school, vocational school, library and club will be erected in a quadrangle. The contract for the erection of the primary school has already been awarded to the Aberthaw Construction Co., Boston. The estimated cost of this building alone is $110,000. Carrere & Hastings, New York, are the Archs.

The New England Foundation Co., Boston, Mass., will drive 2500 Simplex Piles for the foundation of the plant for the Standard Oil Co., at Long Island City, N. Y. A test of one of these piles was made for the building department of New York City. It sustained a load of 60 tons without settlement.

The same firm will use 290 Standard Simplex Piles for the new weave shed of the Naumkeag Steam Cotton Co., Salem, Mass.

CONCRETE STATE HIGHWAY, BRISTOL, CONN.

The following itemized bids were received by the State Highway Commissioner for the construction of a concrete state highway in Bristol, from Charles H. Terry, Bristol.

1275 cu.yd. earth grading	$0.40
2780 cu.yd. borrowed embankment	0.44
Grubbing (lump sum)	1.50
7770 sq.yd. earth grading	0.13
95 cu.yd. rock excavation	2.00
100 cu.yd. wet excavation	2.00
100 sq.yd. telford base	0.60
10 cu.yd. first class concrete	12.00
10 cu.yd. second class concrete	8.00
570 cu.yd. masonry	5.00
10 cu.yd. dry rubble masonry	5.00
10 cu.yd. old masonry relaid	5.00
50 sq.yd. pointing old masonry	0.40
280 lin.ft. corrugated iron culvert, 12-in.	1.00
80 lin.ft. corrugated iron culvert, 14-in.	1.15
340 lin.ft. corrugated iron culvert, 18-in.	1.45
50 lin.ft. corrugated iron culvert, 30-in.	2.75
50 lin.ft. corrugated iron culvert, 36-in.	3.95
470 lin.ft. relaying old pipe	0.10
11 catch basins	20.00
500 sq.yd. cobble gutters	0.60
100 lin.ft. rubble drain	1.00
10 sq.yd. rip rap	1.00
100 lin.ft. removing and replacing fences	0.15
100 lin.ft. new stone wall fence	0.40
100 lin.ft. new wire fence	0.15
100 sq.yd. turf relaid	0.30
100 cu.yd. sand or gravel fill	0.75
12,430 sq.yd. gravel road	0.40
1568 cu.yd. concrete	6.00
Extended totals	$23,345.00

SEWER, ST. LOUIS, MO.

Bids were received by the Board of Local Improvements for constructing Sections 1 and 2 of the Mill Creek sewer from (A) C. A. Moreno; (B) Fruin-Colnon Construction Co. and Mason & Hanger Co.; (C) CARTER CONSTRUCTION CO. (awarded both contracts); (D) Foxhall P. McCormick. The item bids are as follows:

Section 1

	B	C
1800 cu.yd. Class "A" excavation	$3.50	$4.25
57,000 cu.yd. Class "C" excavation	1.65	3.10
10,400 cu.yd. Class "A" concrete	8.00	10.70
1000 cu.yd. Class 'B" concrete	7.00	9.00
250 cu.yd. common brick masonry	10.00	14.00
480 cu.yd. vitrified brick masonry	12.00	18.00
100 lin.ft. sewer pipe, 36-in.	5.00	6.00
100 lin.ft. sewer pipe, 33-in.	4.00	5.50
100 lin.ft. sewer pipe, 30-in.	3.00	4.50
400 lin.ft. sewer pipe, 27-in.	2.50	4.00
100 lin.ft. sewer pipe, 24-in.	2.00	3.00
100 lin.ft. sewer pipe, 21-in.	1.50	2.25
100 lin.ft. sewer pipe, 18-in.	1.00	1.80
200 lin.ft. sewer pipe, 15-in.	0.75	1.50
2000 lin.ft. sewer pipe, 12-in.	0.50	1.00
100 lin.ft. sewer pipe, 6-in.	0.20	0.90
4000 lin.ft. reinforcing steel bars, 1¼-in.	0.10	0.23
42,000 lin.ft. reinforcing steel bars, 1 in. square	0.08	0.19
565,000 lin.ft. reinforcing steel bars, ¾-in. square	0.05	0.10
6500 lin.ft. reinforcing steel bars, ½-in. square	0.04	0.07
12 6-in. slants laid in brick and concrete sewers	100.00	150.00
10 water service pipes to be maintained	20.00	25.00
370 M. ft. b.m. lumber left in trench	50.00	55.00
9000 sq.ft. wakefield piling	0.80	0.55
3000 sq.ft. concrete piling in place	2.00	1.75
50,000 sq.ft. steel sheet piling for bracing	0.75	1.25
18,000 sq.ft. t. and g. sheeting with sand filler in place	0.15	0.25
300 sq.ft. inlet stones	0.50	2.00
200,000 lb. steel beams	0.03½	0.04
10,000 lb. c.i.	0.03½	0.06
4000 lb. w.i.	0.07	0.10
85,600 cu.yd. Class "A" excavation in tunnel	13.50	6.65
3010 cu.yd. Class "C" excavation in tunnel	8.50	5.50
300 cu.yd. enlargement of section in tunnel	10.00	12.00
21,460 cu.yd. Class "A" concrete in tunnel	12.00	10.20
2500 cu.yd. Class "B" concrete in tunnel	10.50	9.20
500 cu.yd. extra Class "A" concrete in tunnel	11.00	11.00
200 cu.yd. extra Class "B" concrete in tunnel	10.00	10.00
3000 cu.yd. dry packing in tunnel	4.00	3.00
140 lin.ft. reinforcing steel bars in tunnel, 1¼-in.	0.12	0.23
1500 lin.ft. reinforcing steel bars in tunnel, 1 in. square	0.10	0.19
23,000 lin.ft. reinfrocing steel bars in tunnel, ¾ in. square	0.07	0.10
2600 lin.fr. reinforcing steel bars in tunnel, ½ in. square	0.05	0.07
1000 lin.ft. steel drain pipes in tunnel, 2-in.	0.30	0.30
1000 lin.ft. extra drilling in tunnel	0.90	0.40
130 M. ft. b.m. permanent timbering in tunnel	80.00	55.00
1000 cu.yd. Class "A" excavation in shafts	40.00	15.00
1750 cu.yd. Class "C" excavation in shafts	30.00	11.00
600 cu.yd. Class "A" concrete in shafts	14.00	12.00
15,000 million ft. gals. pumping from shafts	0.50	0.20
Extended totals	$1,399,924	$1,936,484

Section 2

	A	B	C	D
122,000 cu.yd. Class "A" excavation in tunnel	$9.80	$8.50	$8.35	[illegible]
4600 cu.yd. Class "C" excavation in tunnel	5.00	4.00	7.00	[illegible]
300 cu.yd. enlargement of section in tunnel	12.00	9.50	12.10	[illegible]
30,000 cu.yd. Class "A" concrete in tunnel	10.00	12.30	12.00	[illegible]
1000 cu.yd. Class "B" concrete in tunnel	10.00	10.00	10.00	[illegible]
500 cu.yd. extra Class "A" concrete in tunnel	12.00	13.00	15.00	[illegible]
200 cu.yd. extra Class "B" concrete in tunnel	12.00	12.00	12.00	[illegible]
1200 cu.yd. common brick masonry in tunnel	15.00	14.00	14.00	[illegible]
3000 cu.yd. dry packing in tunnel	3.00	3.00	3.50	[illegible]
100 lin.ft. reinforcing steel bars in tunnel, 1¼-in.	0.20	0.17	0.25	[illegible]
1000 lin.ft. reinforcing steel bars in tunnel, 1-in. square	0.15	0.13	0.20	[illegible]
4600 lin.ft. reinforcing steel bars in tunnel, ¾ in. square	0.10	0.08	0.15	[illegible]
1900 lin.ft. reinforcing steel bars in tunnel, ½ in. square	0.08	0.06	0.10	[illegible]
1000 lin.ft. steel drain pipes, 2-in.	0.25	0.20	0.30	[illegible]
1000 lin.ft. extra drilling in tunnel	0.50	0.80	0.40	[illegible]
237 M. ft. b.m. permanent timbering	60.00	60.00	60.00	[illegible]
3200 cu.yd. Class "A" excavation in shafts	15.00	20.00	17.00	[illegible]
2800 cu.yd. Class "C" excavation in shafts	10.00	16.00	14.00	[illegible]
900 cu.yd. Class "A" concrete in shafts	12.00	12.00	14.00	[illegible]
20 cu.yd. Class "B" concrete in shafts	10.00	10.40	12.00	[illegible]
800 cu.yd. granite concrete in shafts	20.00	13.30	15.00	[illegible]
15,000 million ft. gal. pumping from shafts	0.30	0.40	0.20	[illegible]
100 cu.yd. Class "A" excavation in open cut	5.00	4.00	6.00	[illegible]
4000 cu.yd. Class "C" excavation in open cut	2.50	4.00	5.00	[illegible]
360 cu.yd. Class "A" concrete in open cut	10.00	10.00	12.00	[illegible]
300 cu.yd. Class "B" concrete in open cut	10.00	9.00	11.00	[illegible]
10 cu.yd. granite concrete in open cut	20.00	13.00	15.00	[illegible]
800 cu.yd. common brick masonry in open cut	12.00	15.00	15.00	[illegible]
25 cu.yd. vitrified brick masonry in open cut	15.00	18.00	20.00	[illegible]
300 cu.yd. granite masonry in open cut	7.00	3.50	2.50	[illegible]
100 lin.ft. sewer pipe, 36-in.	5.00	5.00	6.00	[illegible]
100 lin.ft. sewer pipe, 33-in.	5.00	4.00	5.50	[illegible]
100 lin.ft. sewer pipe, 30-in.	4.00	3.00	5.00	[illegible]
100 lin.ft. sewer pipe, 27-in.	3.00	[illegible]	4.50	[illegible]
100 lin.ft. sewer pipe, 24-in.	2.50	2.00	4.00	[illegible]
100 lin.ft. sewer pipe, 21-in.	2.00	1.50	3.50	[illegible]
100 lin.ft. sewer pipe, 18-in.	1.00	1.00	3.00	[illegible]
100 lin.ft. sewer pipe, 15-in.	0.75	0.75	2.50	[illegible]
400 lin.ft. sewer pipe, 12-in.	0.50	0.60	2.00	[illegible]
100 lin.ft. sewer pipe, 6-in.	0.25	0.30	1.00	[illegible]
1600 lin.ft. reinforcing steel bars in open cut, 1¼-in.	0.20	0.12	0.25	[illegible]
6300 lin.ft. reinforcing steel bars in open cut, 1 in. square	0.15	0.10	0.20	[illegible]
6800 lin.ft. reinforcing steel bars in open cut, ¾ in. square	0.15	0.08	0.15	[illegible]
900 lin.ft. reinforcing steel bars in open cut, ½ in. square	0.10	0.06	0.15	[illegible]
1100 lin.ft. reinforcing steel bars in open cut, ⅜ in. square	0.08	0.05	0.10	[illegible]
300 lin.ft. reinforcing steel bars in open cut, ¼ in. square	0.05	0.03	0.10	[illegible]
10 6-in. slants laid in brick and concrete sewers	1.00	1.50	1.50	[illegible]
10 water service pipes to be maintained	25.00	20.00	25.00	[illegible]
30 M. ft. b.m. lumber left in trench	40.00	50.00	70.00	[illegible]
7000 sq.ft. wakefield piling	0.60	0.80	0.70	[illegible]
7000 sq.ft. steel sheet piling	0.80	1.00	1.75	[illegible]
100 sq.ft. inlet stones	1.00	0.00	2.00	[illegible]
1500 lb. steel beams	0.04	0.04	0.05	[illegible]
6000 lb. c.i.	0.04	0.05	0.10	[illegible]
6000 lb. w.i.	0.05	0.07	0.10	[illegible]
15,000 lb. c.i. water pipe furnished and laid	0.05	0.05	0.10	[illegible]
Extended totals	$2,025,140	$1,672,530	$1,682,212	$1,941,965

Pan-American Consuls Form Trade Association—The consuls-general in New York of Latin-American republics met at the rooms of the Pan-American States Association at the Hotel McAlpin, New York, Sept. 8, and organized the Latin-American Consular Association of New York, which will aim to promote trade between the United States and the countries represented.

Consul-General Gonzalez, of Costa Rica, presided at the meeting, and Browne Willis was secretary. Those present included R. C. Tort, chancellor of the consulate-general of Mexico; F. Urquido, consul-general of Mexico; R. Bengoechea, consul-general of Guatemala; Dr. Garcia Leao, of the Brazilian consulate-general; Enrique Galardo, consul-general of Ecuador; E. S. Passos, consul-general of Nicaragua; Francisco Escobar, consul-general of Colombia; P. R. Rincones, consul-general of Venezuela; R. C. Diaz, consul-general of Honduras, and Manuel Gonzalez, consul-general of Costa Rica. Also present were R. L. Dunn, of the Pan-American States Association; P. Fortoul Hurtado, of the editorial staff of "Las Americas," and Dr. J. G. Perez.